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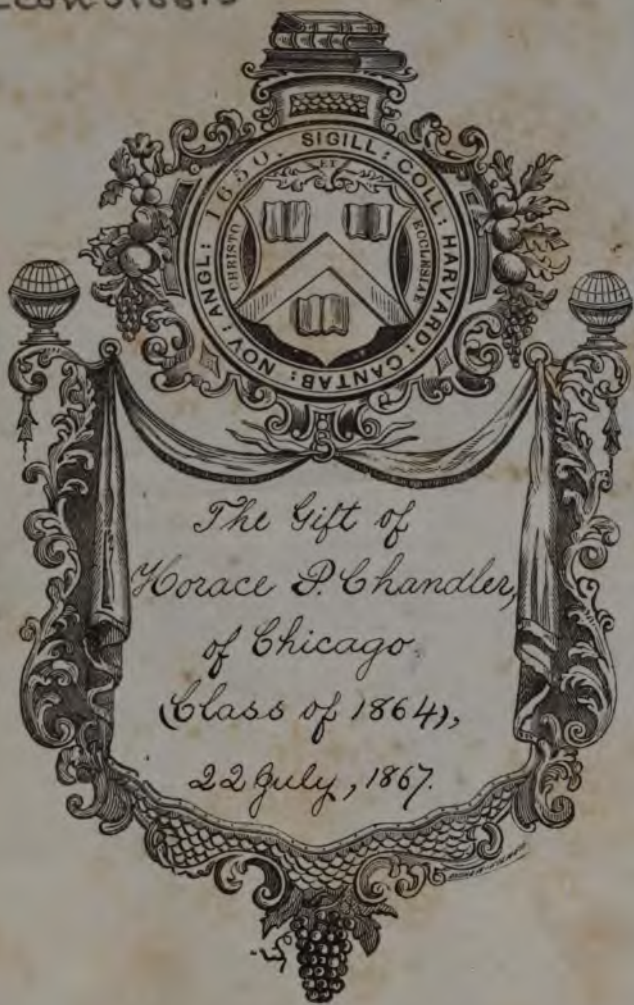
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*Bancroft*

A NEW

RAILWAY OUTLET

— FROM —

# Chicago to the Seaboard.

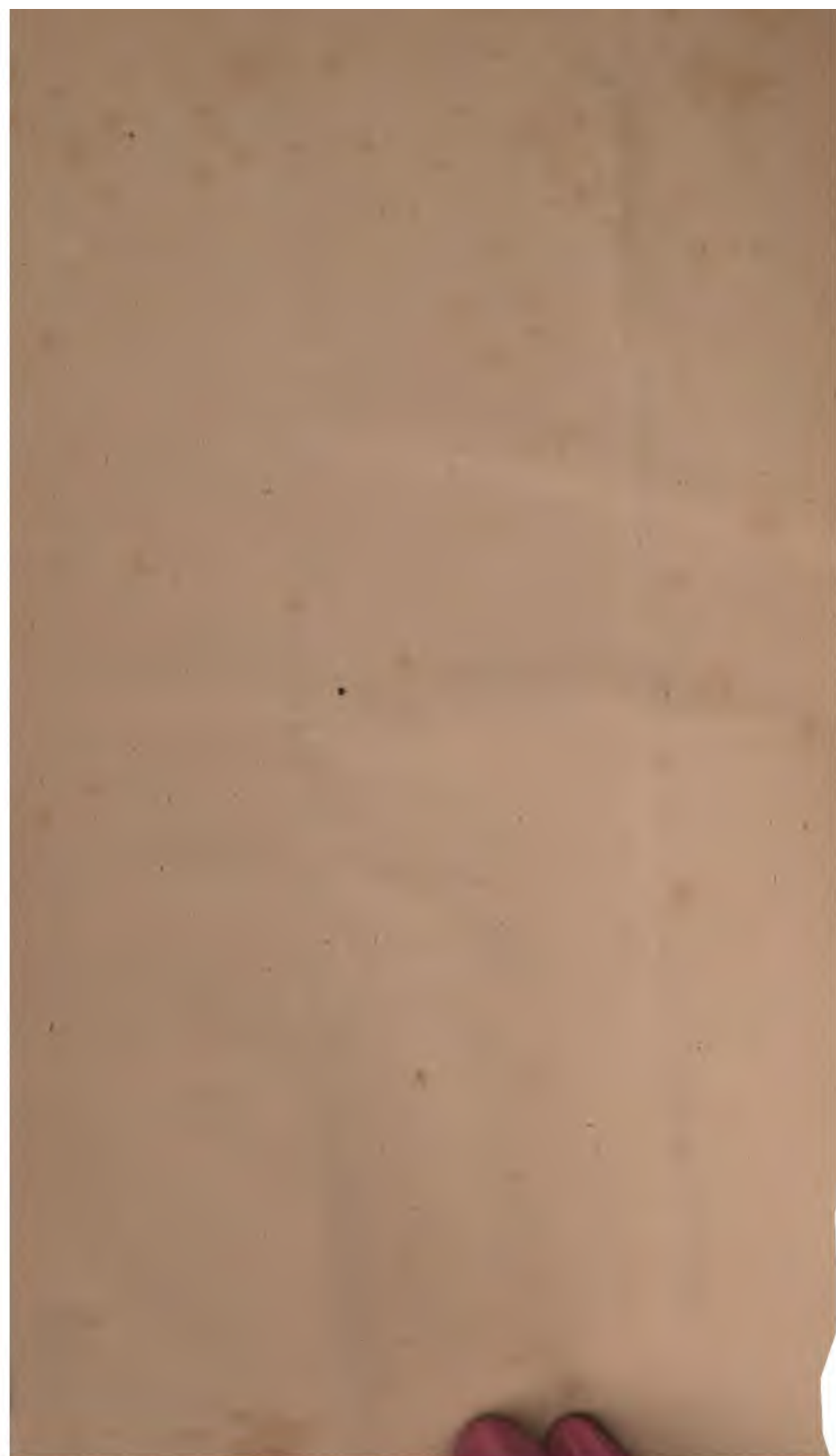
**Port Huron and Lake Michigan Railroad Company--  
Chicago and Michigan Grand Trunk  
Railway Company.**

ORGANIZATION --- RESOURCES --- BUSINESS PROSPECTS.

PREPARED AT THE REQUEST OF THE DIRECTORS,  
By **W. L. BANCROFT,**  
SECRETARY OF THE PORT HURON AND LAKE MICHIGAN RAILROAD COMPANY.

PORT HURON, MICHIGAN.

1866.



A NEW  
RAILWAY OUTLET

FROM

# Chicago to the Seaboard.

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PORT HURON AND LAKE MICHIGAN RAILROAD COMPANY—CHICAGO AND,  
MICHIGAN GRAND TRUNK RAILWAY COMPANY.

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PORT HURON, MICHIGAN:  
1866.

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by J. J.

Horace Parker Sandler  
& Chicago

(H.C. 1866)

## BUSINESS PROSPECTS.

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### Object of this Pamphlet:

The object of the following pages is to set forth the existing necessity for opening new outlets by railway to the seaboard, for the vast annual surplus products of the Northwest; and to indicate a line that will blend, in the shortest route, railway interests of unparalleled magnitude, East or West, and which will traverse a rich and growing section of country, nearly destitute of railway facilities, and therefore certain to afford a remunerative and rapidly augmenting local traffic. The subject is a very extensive one; for purposes of brevity, therefore, only its main features will be glanced at in the text. For those who may be induced, from what may be thus stated, to give the matter fuller attention, copious extracts and references will be found appended. These, it will be observed, are drawn principally from official sources, and therefore entitle the facts stated to unquestioned credibility.

### The Northwest.

The development of the Northwest is amazing, both in its extent and rapidity. In 1840, three of the six States, whose resources we shall have occasion to examine, were not in existence, and the territory comprised in the whole of them contained a population of less than 1,500,000. The population, in 1850, had risen to 2,741,152, and in 1860, to 5,134,409. In 1838, seventy-eight bushels of wheat comprised the grain export from Chicago; in 1854, the amount was less than thirteen million bushels; in 1864, it exceeded forty-four million bushels, while the total export from all Lake Michigan ports exceeded seventy million bushels. (1)

The States of Michigan, Indiana, Illinois, Wisconsin, Iowa and Minnesota comprise the rich granary from which this mighty commerce was created. These States—the creations of yesterday—furnished, in 1860, a grain product of nearly four hundred million bushels. Their horses, neat cattle, sheep and swine are counted by the million. The value of their stock is expressed in hundreds of millions, and of their farms in thousands of millions of dollars. Their population and every product, during the decade ending in 1860, increased from two to ten fold. The Superintendent of the U. S. census of 1860, in chronicling these statistics, exclaims that “such a development is without a parallel in history, ancient or modern.” (2)

### **Commerce of the Northwest.**

It was the commercial facilities afforded by the great lakes and the Mississippi that invited the settlement of the Northwestern States. The pioneers found a single season sufficient to prepare the soil for crops, which might be continued in kind for a long series of years. Agricultural pursuits, therefore, engrossed the industry of the Northwest, and it is to-day the heaviest grain and stock producing region of the world. The aggregate industry of such a community being employed in the production of these great agricultural staples, all other articles of consumption required importation; and thus has been created a commerce which, in the rapidity and magnitude of its growth, is as wonderful as the development of the States. The entire tonnage of the lakes, in 1845, was less than seventy thousand tons; in 1851, the amount had increased to over two hundred thousand tons; and, in 1863, to over four hundred thousand tons. In 1851, the entire exports from Lake Michigan were valued at less than ten million dollars; in 1862, they exceeded eighty-one million dollars. The entire eastward movement of grain in the latter year equalled one hundred and thirty-six millions of bushels, and the total value of eastward freights to tide water was over five hundred millions of dollars. (3)

### **The Channels of this Commerce.**

As late as 1850, this commerce found its outlets to the seaboard by way of the Mississippi river and the Erie Canal. Boston first stretched forth a hand for a share of the direct trade of the Northwest, by opening a railway to Ogdensburgh, on the St. Lawrence river. In 1851, the New York and Erie road was opened for business. In 1854, the New York Central was finally consolidated in a single organization, and commenced a successful through freight business. The Pennsylvania Central, the Baltimore and Ohio, and the Grand Trunk of Canada were subsequently opened. These lines, together with the Erie Canal, comprise the great arteries through which this marvellous domestic commerce flows. And of the nine millions of tons transported between the East and the West in 1862, it is officially stated that only one-third was carried by water. It was, therefore, very properly suggested by the Superintendent of the last U. S. census, that "such is the rapid increase of western products, and the surplus carried to Atlantic or foreign markets, that the time is near at hand when all that can be carried by water will be but a small proportion of the whole." In other words, the commerce of the West can, even now, be carried on only by the aid of vast lines of railway.

The lines named furnish the only existing facilities for transit over the Appalachian Range, and such is the face of the country, that apparently they must remain the sole avenues between the West and the seaboard. They are fed by the commerce floated upon the Missouri and the upper Mississippi and the great Lakes, and by the vast network of railways which already checkers the valleys of the Northwest. Although the Erie Canal receives about one-third of this commerce, the magnitude of the traffic controlled by the railways will be appreciated, when it is considered that

in 1863, it was nearly double that of the total foreign commerce of the United States. (4)

Nearly one-half of this tonnage is afforded by the grain exports of the States whose resources and products we have investigated, and its transportation is principally absorbed by the three more northerly of the routes named. Thus, of the grain traffic, the New York and Erie receives at Dunkirk only about four per cent., the Pennsylvania Central say five per cent., and the Baltimore and Ohio five per cent. The two roads last named, together with the Ohio and Mississippi, and to a large extent the Atlantic and Great Western also, with their connections, accommodate a belt of country which may be considered commercially distinct from the valleys of the Lakes and the upper Mississippi. The central points of this region, at which are conducted exchanges rising to the dignity of commerce, are Cincinnati, as a point of exchange between the States north of the Ohio and those producing many things essentially distinct south of that river, and St. Louis; and its trade is not embraced in the view presented of the exchanges between the Northwest and the East. (5)

#### **Commercial Centre of the Northwest.**

The Northwest has also a commercial centre, and one worthy of itself. At an extreme point of over two thousand miles of inland navigation, on a lake over or around whose waters the entire products of the Northwest, whether destined for the seaboard or the St. Lawrence, must pass, and on a parallel of latitude which its whole commerce necessarily seeks, stands CHICAGO. Nowhere, but in the Northwest, could such a city have been created in so brief an interval. A generation has not passed away since it was known only as a military post, on the extreme Indian frontier. In 1840, its population was less than 5000; to-day it is 200,000. Its every appointment is on a scale befitting such unprecedented growth. Its very streets have been reclaimed from the bubbling sloughs of a mucky prairie, raised to a healthy level, and substantially paved. Its business structures and hotels and public buildings, will not suffer by comparison with those of any eastern city. Its grain and packing warehouses are unequalled. Its harbor has been created by dredging. It is tunneling Lake Michigan to afford wholesome water, and inverting the current of its river from the lake to the Mississippi, to secure perfect drainage and a pure atmosphere to its citizens. It is the centre of a railway system unrivalled in the world. There is not a section of the Northwest with which it is not connected by rail. The great Chicago and Northwestern road reaches to Lake Superior, and, with the St. Paul road, bisects Wisconsin and penetrates Minnesota, tapping the entire railway systems of those States, and striking the line of the Northern Pacific Railway. The Galena and Chicago Union road, the Chicago, Fulton and Iowa road, and the Chicago, Burlington and Quincy road, respectively, connect with independent lines through Iowa, all of which are partially constructed, and intended ultimately to reach the Missouri river, and at least one of which is to be extended into Nebraska, connecting at Omaha with the Union Pacific Railroad. The Chicago, Burlington and Quincy road connects also with

the Hannibal and St. Joseph road, passing through northern Missouri to St. Joseph, which is already connected by rail with Lawrence, Kansas, where another connection is made with a branch of the same Union line to the Pacific. These various lines, together with the St. Louis and Illinois, the Chicago, Alton and St. Louis, the Illinois Central, and the Chicago and Milwaukee, constitute the main lines of railway converging at Chicago, and, together with their connections, place the entire Northwest under tribute to that city. There are not less than sixteen different points on the Mississippi river connected with Chicago by rail. The aggregate length of the lines of railway radiating from that city is over 8000 miles.

#### Commerce of Chicago.

It were a waste of words to amplify upon the commerce of such a point. Its growth and present proportions will be best illustrated by contrasting the statement of its principal articles of export for 1864 with that for 1852, when the first railway line leading eastward was opened :

| ARTICLES.                          | 1852.     | 1864.      |
|------------------------------------|-----------|------------|
| Flour, bbls.....                   | 61,190    | 1,153,486  |
| Wheat, bus.....                    | 941,470   | 16,312,819 |
| Corn, bus.....                     | 2,757,011 | 12,557,925 |
| Oats, bus.....                     | 2,080,817 | 14,688,697 |
| Rye, bus.....                      | 127,028   | 793,708    |
| Barley, bus.....                   | 17,315    | 262,145    |
| Highwines, bbls.....               | 7,027     | 133,145    |
| Hides, lbs., (1858).....           | 8,693,832 | 18,561,985 |
| Number of Beef shipped (1855)..... | 8,253     | 179,520    |
| "    Pork.....                     | 145,580   | 701,854    |
| "    Beef packed.....              | 21,896    | 65,000     |
| "    Pork.....                     | 43,156    | 357,640    |
| Flour, manufactured, bbls.....     |           | 259,058    |
| Corn Meal, " tons.....             |           | 18,200     |
| Seeds, lbs.....                    |           | 10,224,598 |

It will readily be observed that the extraordinary development of the Northwest has made Chicago the most important central market on the continent. Indeed, in the great agricultural staples, her market is unrivalled in the world. Her grain trade far surpasses that not only of Odessa, the great grain mart of Europe, but of all Russia. Formerly Cincinnati and St. Louis were the chief stock marts, but Chicago has surpassed them both, as a collecting point for the immense herds of beesves which annually graze on the great prairies of the Northwest, and for the enormous crop of hogs annually marketed by its farmers and stock breeders. To any one not acquainted with the progress of the West, such a growth of trade and commerce is scarcely conceivable. And when we consider what a small fraction of the country, of which Chicago is the natural commercial centre, has yet been populated and developed, who will venture to predict the proportions which this trade will have assumed ten years hence ? (6)

#### Outlets of this Commerce.

The grain trade principally seeks the lake for export. Its increase has been over six-fold, while the tonnage of the lakes scarcely doubled between 1851 and 1864. The increase in all articles which seek the railroad, since 1852, when the first outlet by rail to the eastward was opened, has been from two to twenty-fold. Thus, of flour, the increase was over nineteen-

fold; of pork packed, over seven-fold; of hogs shipped, five-fold; of cattle shipped, twenty-one-fold; of beef packed, over three-fold; highwines, nineteen-fold, etc. (7)

The Michigan Central, the Michigan Southern, and the Pittsburgh, Fort Wayne and Chicago roads, are links in the only direct lines from Chicago to the seaboard; and all of them were completed prior to 1857. The volume of imports tallies with that of exports; and we can, therefore, comprehend why every avenue of Northwestern commerce is pressed to overflowing, until its currents have become so clogged that the inconvenience and damage are severely felt in their every ramification. And we can appreciate the necessity which recently assembled the leading business men of the country, from Halifax to St. Paul, and from New York as far down as St. Louis, in a commercial convention at Detroit, where the principal topic of discussion was the opening of new routes of transit between Chicago and the seaboard. (8)

#### Existing Railway Routes.

The existing lines of railway between the lakes and the seaboard illustrate the limited conceptions of even our most sagacious business men, of the demands likely to be made upon them by the traffic of the Northwest. The various lines, with a single exception, were originally local enterprises. The only really direct GREAT NORTHERN ROUTE remains to be completed. The Pittsburgh, Fort Wayne and Chicago road, and its connections through Pennsylvania and New Jersey, constitute a great Southern Route, and hence comparisons with it are not necessary to our purpose. The distances by existing central lines are as follows:

##### MICHIGAN CENTRAL AND CONNECTIONS.

|                                                     | MILES. |
|-----------------------------------------------------|--------|
| M. C. R. from Chicago to Detroit.....               | 284    |
| G. W. R. R., from Detroit to Suspension Bridge..... | 230    |
| N. Y. C. R., from Suspension Bridge to Albany.....  | 304    |
| H. R. R., from Albany to New York.....              | 150    |
|                                                     | — 968  |

##### MICHIGAN SOUTHERN AND CONNECTIONS.

|                                           |       |
|-------------------------------------------|-------|
| M. S. R., from Chicago to Toledo.....     | 143   |
| L. S. R., from Toledo to Dunkirk.....     | 65    |
| N. Y. & E., from Dunkirk to New York..... | 460   |
|                                           | — 968 |

By the Michigan Central route, all freight is transhipped at Detroit, and again at Suspension Bridge. The heaviest drawback, however, upon the latter route is the ferriage of Detroit river. It is during the winter months, when these roads are the sole reliance for transportation, that they should do the heaviest freighting business; but, during winter, the Detroit river is often impassable for days, and not unfrequently for weeks together. The bulk of the freight, by the Michigan Southern route, is transhipped at Toledo, and again at Buffalo, during the season of navigation, or at Cleveland or Dunkirk when carried by all rail. These facts render quite apparent some of the reasons for the frequent damming up of the swollen currents of commerce between the East and the West. (9)

### **Feasibility of New Routes.**

It may well be doubted whether the opening of new water routes would greatly relieve the existing pressure upon the western railways. We have had occasion to note, that freights of all descriptions, not in bulk, prefer the roads to the water from Chicago; and we have quoted high authority for the assertion, that the commerce of the West can be carried on only by vast lines of railway. The immense business done by our "Express" lines, "Fast Freight," and "Dispatch" lines, indicate the preference of shippers for the most expeditious facilities, even over the ordinary traffic of the railways. Many able engineers question the practicability of additional thoroughfares across the great dividing ridge formed by the Alleghany mountains. It is therefore essential, that all projected lines farther to the westward shall secure a connection with one or more of these existing lines. And again, no railroad has been built in this country with a view solely to through business. In fact, the profits of all paying lines are comprised in their receipts from local traffic. Now, urgent as is the need of new commercial outlets from Chicago, it is not easy to meet these conditions. Indiana and Ohio are covered with a fine network of railways, connecting various through lines, and accommodating nearly every hamlet in those States. The Michigan Southern is already a double line most of the way to Chicago. An additional line to Detroit would only increase existing embarrassments, by swelling the accumulations which so frequently choke up railway transit there. More than all this, no new routes through those sections could command much new business beyond that offered at Chicago; and not one of them would facilitate the flow of the more northerly currents of this magnificent commerce.

### **Where is the Route?**

An examination of a good railway map will disclose the proper route for any new railways from Chicago. It will be observed that Michigan lies about midway in the zone which, to the eastward, takes in the New England States, New York, the Canadas, and New Brunswick, and, on the west, portions of Indiana and Illinois, Wisconsin, Minnesota, Iowa, Nebraska, Washington and Oregon; and that all the thoroughfares between the East and the West finally seek a parallel of latitude well within the southern limits of Michigan for their passage of the Alleghanies.

It will be observed further, that of the six trunk lines which we have found stretching to the seaboard, four of them converge at the foot of Lake Huron, viz., the New York and Erie, the New York Central, the Vermont Central and the Grand Trunk of Canada. It has been shown, that all the important railways of the West converge at Chicago. If, then, you connect Port Huron direct with Chicago, you will have united the entire railway systems of the East and the West, by the shortest possible line, and will have opened up the most legitimate channel for mingling the various currents of the commerce of a vast and prolific belt of States, the very garden of the continent.

**It is the Shortest Route.**

This will be demonstrated by comparing the actual distances with those already given.

**VIA BUFFALO AND N. Y. & ERIE.**

|                                         | MILES. |
|-----------------------------------------|--------|
| Chicago to Port Huron.....              | 317    |
| Port Huron to Buffalo, Grand Trunk..... | 196    |
| Buffalo to New York, N. Y. & Erie.....  | 423    |
|                                         | — 936  |

**VIA BUFFALO AND N. Y. CENTRAL.**

|                                         |       |
|-----------------------------------------|-------|
| Chicago to Port Huron.....              | 317   |
| Port Huron to Buffalo, Grand Trunk..... | 196   |
| Buffalo to Albany, N. Y. Central.....   | 304   |
| Albany to New York, H. R.....           | 150   |
|                                         | — 967 |

**VIA SUSPENSION BRIDGE.**

|                                                   |       |
|---------------------------------------------------|-------|
| Chicago to Port Huron.....                        | 317   |
| Port Huron to Suspension Bridge, Gt. Western..... | 180   |
| Suspension Bridge to Albany, N. Y. Central.....   | 304   |
| Albany to New York, Hudson River R.....           | 150   |
|                                                   | — 951 |

We have seen (page 7) that the distance by the Michigan Central route is 968 miles, and by the Michigan Southern 958 miles. It thus appears that this route will have for its shortest connections the advantage of 22 miles over the Southern road, and of 32 over the Central. It will shorten the distance, via the N. Y. Central from Suspension Bridge, 17 miles. A new route to New York will be opened with the commencement of navigation on the Hudson, in a line from Schenectady to Athens, and thus a branch of the Central. Athens is forty miles north of Poughkeepsie, one hundred and fifteen miles from New York city, twenty-nine from Albany, immediately opposite Hudson, with which place it is connected by a ferry. By this new route, passengers for the West will save a traveling distance of *sixty-seven miles* over the route by Detroit and Albany. It will, therefore, be *the shortest practicable route between Chicago and the seaboard.*

**It will be a Uniformly Reliable Route.**

The traffic upon this route will not be liable to interruption during the winter, when the road will be most needed. It will have a reliable crossing at Suspension Bridge, and by the International Bridge soon to be completed, also at Buffalo. Port Huron is situated upon the river St. Clair, 44 miles *north*, and 33 miles *east* of Detroit, and opposite Sarnia, the terminus of both the Grand Trunk and the Great Western Railways. The width of the river here is half a mile, the water deep, forming a commodious harbor, with a current just rapid enough to prevent its being ice-bound. At a point just above, where Lake Huron disembogues its waters, and where stand the depots of the Grand Trunk Railway, the width between banks, for some distance, is only about 800 feet, being the narrowest point, excepting below Niagara Falls, between the lakes and the sea. The Grand Trunk Railway Company have a floating bridge established there, capable of transferring five hundred loaded cars per day. Only three times during the last thirty years has the river been closed at that point, and then only for a few hours.

The crossing at the Great Western depot, though not equal to this, is seldom difficult, and is much shorter and far more reliable than that of Detroit river. The advantages of Port Huron, in this particular, are so superior, and so well understood, that during the winter months, stock trains pass this way from both the other roads. Entire freight trains, detained in Detroit by the ice, are often passed over to the Grand Trunk, which as yet has never failed to forward them without a moment's delay. It was stated by a leading commercial citizen of Detroit, in a communication to one of the city papers last spring, that there were *twenty thousand tons* of freight lying there, which could not be carried for want of means of transportation. The "close connections" of the Michigan Central and the Great Western roads, *together with the difficulties of the transit of Detroit river*, will explain, to a great extent, this periodical plethora of the Detroit warehouses. Such complaints are not unusual upon the breaking up of the "icy embargoes" there. The great importance to a railroad route of being able to keep open its connections may thus be appreciated. And this advantage of the proposed route must give it a superiority even greater than that it will possess in the item of distance.

#### **It may be a Continuous Gauge Line.**

If the line from Port Huron to Chicago shall, as has been suggested, be laid with a broad gauge, it will form a continuous gauge from Chicago to Buffalo, 513 miles; to Montreal, 819 miles; to River de Loup, 1113 miles, and to Portland, 1112; and by the Great Western to Suspension Bridge, 497 miles. Or, if it shall be laid with a narrow gauge, it may be safely inferred from the speech of Hon. JOHN WATKIN to the shareholders (to be found in the appendix,) that the Grand Trunk will lay a third rail from Port Huron to Buffalo. Assurances have been given that in the event of the narrow gauge being determined upon, the Great Western will lay a third rail to Suspension Bridge. This would be equivalent to a double track for that company for 172 miles of its line, and would more than double its carrying capacity. The roads of Michigan are of uniform gauge, and the advantages of intimate connections with them, will be admitted when we come to speak of the prospects for local business along this route. *The question of gauge is yet an open one.*

#### **Superiority of its Railway Connections.**

The merits of this line will command for it, at Chicago, connections unsurpassed by any road now terminating there. Arrangements, the writer is assured, have been sufficiently matured to insure this. At Port Huron it will strike the longest line of railway on the continent, constituting in itself an extended northern line; and also the Great Western to Suspension Bridge, shortening the distance over that road, via Detroit, *fifty miles*. It will thus secure, by the great International and Suspension Bridges, the most intimate and reliable connections possible with the New York and Erie, and the New York Central roads, and through them with the entire railway system of New York, and open the shortest possible lines to both New York city and Boston; and, taking the main line of the

Grand Trunk, it will connect with every railroad in Canada, and reach the seaboard at Portland and Boston; while, by means of its connections at Ogdensburg and Montreal, it will lay under contribution the entire railway systems of New England from another direction, and must largely influence the rich traffic of the leading manufacturing sections of the Union.

The Michigan Southern strikes a single main line at Toledo, and the Central a single main line at Niagara river. This line will open up *direct* connections with *four* main thoroughfares in New York, and with *five* independent lines penetrating New England, and terminating on the seaboard.

#### **Importance of these Connections.**

As early as 1851, there were twenty-eight lines of railroad in operation in New York and New England, all of which had been constructed with a view to their becoming avenues of the trade between the East and the West. The expenditures in New York for the control of this trade then amounted to \$110,410,681, and in New England, for the same purpose, to \$46,348,951. Every one of these roads, with their connections, will be opened, by the shortest route possible, to a blending of business with this line, now in course of construction, from Port Huron to Chicago. It will thus constitute only the *third* direct link between *eight* main lines of road converging from the westward at Chicago, and *twenty-three* roads in New York and New England.

The New York Central comprises the six lines of railway, existing in 1851, between Albany and Buffalo and Niagara Falls. (10)

#### **Will the Through Business Pay?**

Can there be a serious question, then, that this line, substantially built, generously stocked and prudently managed, will command a paying through traffic, in both passengers and freight, and become at once the most important railway outlet from Chicago to the sea? After what we have shown of the vastness of the annual products of the Northwest, and the consequent imperative necessity for a new and independent link in the railways to the seaboard, it cannot be deemed hazardous to assume that the earnings of this line, from through business, will at least equal those of the existing Michigan lines. These were, in 1864, for the Central, \$1,795,268, and for the Southern, \$1,407,452.

#### **Local Business.**

The probable local traffic of this line may be estimated upon data quite as conclusive, though not so direct, as is furnished for through business by the reports of existing roads.

#### **The State of Michigan.**

The State of Michigan comprises a landed area of 56,243 square miles, or 35,995,520 acres. In the extent and variety of its natural resources, it is unrivalled, while its fertile soil and equable climate afford the husbandman

unfailing guarantees of rich returns for his labor. Its copper mines are unequaled in the world. Lead ore, richly seamed with silver, is found in abundance. Its iron rivals that of Sweden in quality, and the store is inexhaustible. Its forests of pine and oak surpass all others east of the Rocky Mountains. Its deposits of coal, now beginning to be uncovered, extend over an area of nearly 7000 square miles. Its fisheries are vast and reliable. Beds of gypsum and quarries of marble, sandstone and limestone are abundant. Skirting its borders are three great lakes, indented by commodious bays and harbors; while noble rivers thread its surface, and furnish an abundance of water power for all the requirements of varied and extensive manufactures.

In population, Michigan was, in 1810, the lowest of twenty-four States; in 1820, the lowest of twenty-six; in 1830, the twenty-sixth of twenty-seven; in 1840, the twenty-third in twenty-nine; in 1850, the twentieth of thirty-three; and in 1860, she had risen to the sixteenth in rank of thirty-four States. In area, it is the ninth State in the Union; in mineral wealth of a certain class, it is the most prominent State. It furnished one-fifth of the entire salt product in 1864; its lumber product increased three-fold from 1850 to 1860, ranking third in the Union. Its wool clip was the fourth in rank; its fisheries fifth; its wheat seventh; and its product of flour and meal, which doubled in ten years, placed it eighth in rank. In product of leather, it is the fifteenth; in improved lands, the seventeenth; in live stock, the eighteenth; and in the value of real and personal estate, the twenty-fifth in rank among the States of the Union. In 1860, the average of manufactured products for each inhabitant, exceeded that of any other Northwestern State more than four millions of dollars. (11)

#### Her Main Lines of Railway.

Michigan possesses three main lines of railway, but only one of these is so located as to command through business, and at the same time to secure a full share of the general local traffic of the State. The Southern road traverses but five counties, lying upon the extreme southern boundary, and thence diverges into Indiana. The Central traverses the tier of six counties adjacent to the northward. The Detroit and Milwaukee pierces but one of the third tier of counties, and strikes thence northwardly to Grand Haven, on Lake Michigan. The eastern termini of all these roads are on the waters of Lake Erie. The courses of the Central and Southern lines are parallel to each other, and they often approach within twenty miles. The so-called "Central" is not at an average distance of more than thirty-five miles from the southern boundary of the peninsula.

By far the larger and more profitable income of all these lines is derived from their local traffic. Indeed it is well known that the Detroit and Milwaukee is principally sustained by its receipts from this source. In the Appendix will be found a table, showing the business of these three roads for a series of years, as fully as data for the same could be conveniently procured. (12) These tables show that the Michigan

roads are no exception to the general rule, that through business affords less than fifty per cent. of the total income, while the proportion of expense is against it.

#### Comparisons with the New Line.

The area of the counties traversed by our line of railway is about 125 per cent. greater than that of those on the Southern, and over 33 per cent. greater than those on the line of the Central road. The population of the counties on our line is 125 per cent. greater than it was on the line of the Southern, and over 25 per cent. greater than it was on the line of the Central in 1850. It exceeds that of the southern counties to-day nearly 55,000, and, excepting only the county of Wayne, that of the Central over 11,000. The real and personal valuation of these counties is now more than twice as much as was that of the Central, and nearly five times as much as was that of the Southern in 1851, or years after those roads were running through Michigan. (13)

The Michigan Southern road can hardly be considered a fair criterion of the extent to which local business can be made profitable to our line, as only 128 miles of its main line lie within this State. Still, by the table just referred to, it will be observed that the receipts from way freight have uniformly exceeded the through, with the exception of two years, while the receipts from way passengers exceed those from through nearly 50 per cent. The statement of the Central business does not distinguish between local and through passengers, but it is understood that the ratio is more largely in favor of local passengers than the reports exhibit it to be in freights. But neither does the Central furnish a complete standard by which to anticipate the local traffic of this line. That road traverses but 218 miles, while ours will span 251 miles of the most fertile lands of Michigan. That road receives feeders at only a single point, and those from sections supplied with railroad facilities. Our road will cross *five* existing lines of railway, a liberal share of the traffic of all which must, from the mere force of the geographical position of our line, gravitate towards it. There are three or four other roads now building, and likely to be completed within the next three years; and all of them must necessarily contribute largely to the business of this line.

The aggregate real and personal valuation of the counties crossed by the Southern and Central roads, is less than one-half that of the State. There is hardly a staple, the product of which along our line, is not largely in excess of similar products along the Southern road, and only in the articles of pork, wheat and wool, is the Central considerably in excess. Our counties contain 81 more flouring mills than the Southern, and 29 less than the Central; and the product of our mills, in 1864, is reported at 25,000 barrels more than that of those along the Southern line. And the water power along those roads is worked up to its maximum, whereas, though in Berrien, Van Buren and Allegan counties alone, the number of run of stone in operation is 349, the power unimproved exceeds 700 run, besides the many fine sites remaining wholly unimproved in Barry, Eaton, Ingham and Genesee counties.

The cost of the Central road is set down in the report to the stockholders for 1854, at \$9,134,286. Its net earnings that year were \$675,486. Its existing liabilities are thus stated in its report for 1865:

|                                 |                 |
|---------------------------------|-----------------|
| The Bonded Debt amounts to..... | \$7,565,488 89  |
| Capital Stock .....             | 6,491,386 00    |
|                                 | <hr/>           |
|                                 | \$14,056,874 89 |

Its net earnings were \$1,739,269. Its stock is quoted (March 22) at 112.

The liabilities of the Southern road were set down in its report for 1864, as follows:

|                            |                 |
|----------------------------|-----------------|
| Debt .....                 | \$8,309,649 63  |
| Stock .....                | 10,120,400 00   |
| D., M. & Toledo Stock..... | 41,600 00       |
|                            | <hr/>           |
|                            | \$18,471,649 63 |

Its earnings were \$2,215,629; or say, for net earnings, \$1,107,814.

The Central has, with the exception, as the writer is informed, of a single year, regularly paid dividends on its stock of from eight to fifteen per cent. The Southern, notwithstanding its accumulated liabilities, is steadily gaining ground, having wiped out its floating indebtedness, and resumed the payment of dividends upon its common stock.

Upon the showing thus made, it cannot fairly be doubted that our line will enter at once upon a business certain to yield net returns equal in amount to those of the Southern for 1865. Its cost is set down by competent and experienced engineers at \$10,000,000. If this shall not be exceeded, it follows that the net earnings may be calculated at over 11 per cent. Or, if its earnings should equal those of the Central—and we think it will be admitted in the sequel that such is not an extravagant anticipation—its net earnings will exceed seventeen per cent. on all its liabilities, bonded and stock.

#### **Superior Advantages for Local Business:**

While the through connections of this line have been found so superior to those of any existing organization in the State, it possesses accessories for the control of way business such as cannot be secured by any other road.

#### **Wisconsin Business.**

This line of railway will touch Lake Michigan at St. Joseph, where it will secure a liberal share of the trade from Wisconsin and Minnesota, via the lake. The harbor of St. Joseph is the best upon the lake, and its facilities for competing for its full proportion of the trade from Wisconsin ports, are much superior to those of Grand Haven. Several of the Wisconsin railway companies have expressed the liveliest interest in the construction of this line. The enterprising manager of the Western Union Railway of Wisconsin, expresses the opinion that his road alone will furnish at St. Joseph all the freighting business that we can do. And it will be observed that large contributions of business at this port are also promised from Milwaukee. (14)

### Coal and Plaster.

The coal fields of Michigan will all be directly opened to this line. These coal measures underlie portions of fourteen counties, covering an area of nearly 7000 square miles. The yield is found to be about 2000 tons per acre, and the quality, after repeated tests, is pronounced good. The coal mining business increased from 6000 tons in 1854 to 14,000 tons in 1864, and is destined soon to rank among the most important industrial interests of the State. The opening of this road will greatly accelerate the development of these vast deposits. The commanding commercial position of both Port Huron and St. Joseph, indicate that with adequate railway facilities, these points alone will afford markets for coal exceeding that of Detroit, which it is stated by Mr. WINCHELL in his Geological Report, imported in 1861 from Cleveland and Erie 26,000 tons.

The gypsum or plaster trade of Michigan is very great, over 21,000 tons having been transported over the two southern lines of railway in 1864. The beds of this material lie in Grand Rapids and at Alabaster, on Thunder Bay, an indentation of Lake Huron. This road will have facilities for reaching Grand Rapids superior to either of the two southern roads, while Port Huron being 75 miles nearer Alabaster than Detroit, it can control this trade from that point. The Alabaster gypsum is superior to that obtained either in Ohio or Grand Rapids. A company has been organized for working these beds, and the opening of this road will at once give important proportions to the trade, both for local consumption and for export to points south and west of Chicago. (15)

### The Lumber Trade.

Lumber is a leading staple of Michigan, the total product for 1864 being estimated by Hon. JAMES B. PORTER, Secretary of State, in his "Introductory Remarks" on the census of that year, at eight hundred million feet. Its home valuation was \$16,000,000. Of this vast amount 263,413,000 feet were manufactured on the Saginaw river, and 142,799,866 at Muskegon; being over one-half the aggregate production of the State. At least four-fifths of the amount exported, went into the Chicago market. As this line will open up direct railway communication between Saginaw and Chicago, and as Saginaw is remote from the direct track of vessels bound to or from that port, it is believed that our road will compete successfully in the freighting of lumber. It is estimated by the Jackson and Lansing Railroad Company, that lumber may be profitably freighted over that road and the Central to Chicago, at \$3.00 per M. feet. But even at \$4.50 per M., when time, risk, and the average rate of lake freights are considered, undoubtedly the railways will be preferred. The Grand Rapids and Indiana Railroad—one of the Congressional land grant railway enterprises, now ready for the roll on about fifty miles of its line—will enable our road to open up to Chicago the entire lumber region of western Michigan, embracing the Muskegon country, by the most direct railway connections.

The movement of "Produce of the Forest," by the Southern road in 1864, was nearly 48,000 tons. Even with its comparatively circuitous con-

nections, the Central transported in 1863, over twenty-one million feet of pine lumber, and nearly thirteen millions of shingles. The local demand along our line must be fully equal to that upon either of those roads, while its through trade in this article must form a prominent item, both in amount and profit.

Through the counties of Lapeer and Genesee, also, seemingly inexhaustible forests of pine abound, turning out annually over sixty million feet of saw logs, to find their way down the shallow and tortuous streams of those sections, to Saginaw and Port Huron. Most of this vast property is delayed in its floatage until the second and third year, at great cost of time and labor, and at no small loss in stock. Many of the lumbermen most largely interested, are among the liberal subscribers to the stock of the Port Huron and Lake Michigan Company, and earnest advocates of its construction. With our road completed, most of this timber will be manufactured at the crossing of the streams, and shipped to the St. Clair river, where it may have water transportation, (by grain vessels, upward bound in ballast, at an average rate of \$1.00 per M.), or to any quarter of the world; or it must find its way westward along our line to Chicago. The amount of lumber furnished annually from this section will exceed forty million feet. A single firm are now preparing to remove their two mills, capable of turning out eight million feet per annum, from Port Huron into Lapeer county. (16)

#### **"Northern Michigan."**

There are twenty-two organized and seventeen unorganized counties lying north of the lines of the Port Huron and Lake Michigan and the Detroit and Milwaukee railways. These counties comprise an area of 23,054 square miles, or nearly one-half that of the State, and about three times that of the counties traversed by *both* the Central and Southern roads. This territory, greater in extent than several of the States, has only begun to be settled and developed. In 1854, its population was only 30,000; in 1864, it had risen to 83,051, an increase of nearly two hundred per cent. in ten years. It may be said to embrace the entire lumber and salt producing regions of Michigan, with coal, iron, plaster, and stone in rich abundance. The soil is fertile throughout, even the vast pine forests being generally interspersed with heavy growths of beach, maple, oak, etc. The climate is milder than is found in the same latitude, either east or west of the lakes. The Secretary of the State Board of Agriculture, in his Report for 1865, states the difference in temperature between the opposite sides of Lake Michigan to be from ten to twenty degrees in favor of this State.

The northern limits of Mecosta and Isabella counties are 145 miles north of the southern boundary of the lower peninsula. These counties were organized in 1859, when they were one unbroken wilderness. In 1864, their united population was 3226, and the census returns show that they raised 11,859 bushels of corn, 8138 bushels of wheat, 10,954 bushels of other grain, 14,282 bushels of potatoes, 1485 tons of hay, 670 pounds of wool, marketed 19,080 pounds of pork, and made 23,214 pounds of butter, 560 pounds of cheese, and 55,654 pounds of maple sugar. Even in Grand

Traverse, 226 miles north of our southern border, with a population of only 2017, fully one-half of whom are engaged in lumbering, the products the same year are reported at 9386 bushels of corn, 12,154 bushels of wheat, 4000 bushels of other grain, 16,127 bushels of potatoes, 613 tons of hay, 191 pounds of wool, 2600 pounds of pork sold, 18,758 pounds of butter, 131 pounds of cheese, and 15,817 pounds of sugar. Fruits of all kinds thrive, even peaches ripening as far north as this county. And it has now come to be generally admitted that every portion of the lower peninsula will yield certain and bountiful returns to the cultivator, and that all the cereals and fruits of the latitude of the Middle and Western States thrive within its borders. Settlement and cultivation have dispelled forever the preposterous tales, once so rife, that the northern portion of our lower peninsula is a wild and irreclaimable waste.

The development of the counties north of the two main lines of railway has been as remarkable as that of any other section of the Northwest. In 1840, they contained a population of only 72,949, or less than one-third that of the State. In 1864, their population had risen to 403,812, or more than one-half that of the State. The aggregate increase of the two tiers of counties, facetiously termed "Central" and "Southern" Michigan, during the interval named, was 187,661, or less than two-fold, while the increase in "Northern Michigan" was 330,868, or nearly five-fold. The proportions of increase in most agricultural staples, are about the same. In products of the forest, minerals, salt and plaster, there can be no comparison, the lower counties being nearly destitute of merchantable timber and minerals.

The progress of this rich and broad region must henceforth be more rapid than that of any other portion of Michigan. Considerable settlements already fringe its borders, and the industrious and restless pioneer has penetrated to its heart. Congress has made liberal grants for wagon roads to extend from Saginaw on the east, and from Grand Rapids on the west, to the straits of Mackinac. Measures are being perfected to consolidate the several Congressional land grants heretofore divided between three independent lines of railway to the straits. This seems likely to be accomplished, and thus will be secured the early completion of a line of railway through the entire length of the peninsula. The "Flint and Pere Marquette Railroad Company" intend to extend their road twenty-seven miles northward from Saginaw during the present year. This will give a line of railway penetrating "Northern Michigan" forty-eight miles north of the line of our road, and *one hundred and two miles* north of the line of the Central. (17)

After careful inquiry, the writer is satisfied that the trade of this vast section—in its infancy so rich, and in its increase so certain—may be set down as divided thus: with Chicago, seven-tenths; with the East, two-tenths; and with Detroit and Ohio, one-tenth. Neither the Central nor Southern roads now receive any share of its through traffic worth naming; nor, after the completion of this line can the Detroit and Milwaukee control the bulk of it. The western terminus of that road being upon Lake

Michigan, the obstacle of transshipment for heavy freights has already been found incompatible with profits. Its eastern terminus being at Detroit, a distance of about *one hundred miles* is added on all business going and returning from Suspension Bridge and points east. This line, then, must be, and forever remain, the great thoroughfare for "Northern Michigan," and must find its revenues richly and steadily augmented, as that vast region, teeming with varied wealth, continues to be opened to settlement and cultivation. But, should only one-fourth of its population find themselves best accommodated by the new road, it will then have a population tributary to it, in excess of the Central, of nearly 80,000, and of the Southern, over 154,000. If the ratio of increase between the two southern tiers of counties and this section shall continue another decade—and there is every probability that it will be exceeded,—the preponderance of "Northern Michigan" will render comparisons preposterous.

#### Local Railway Connections.

While the geographical location of this road is such that, as a great East and West thoroughfare, it can never be successfully tapped, the same fact of advantageous location renders it inevitable that all lateral lines must become feeders to it. Owing to the conformation of the lower peninsula, such lines are essential to easy egress from the State. Approaching from the northward, this road will be the first that they will strike which can fully accommodate the important currents of travel and transportation, setting either eastward or westward. From the southward, they can touch it only to receive its own distributions of local passengers and freight; for every mile traveled southward increases the distance to Chicago, or, if the traveler be bound eastward, the direct route will be regained again only at an additional distance via Detroit, or around the waters of Lake Erie. Of the various roads projected in Michigan, there is but one which can be other than an important auxiliary to the business of this. That one is projected from Holly to Monroe, and, if completed, will doubtless take (to the detriment of the Detroit and Milwaukee, and of the Detroit, Monroe and Toledo,) such portion of the business of Northern Michigan as naturally seeks Toledo, Cincinnati, etc. There are *five* railways now operated, and *two* in course of construction, with which this will have intimate connections.

##### 1. *Flint and Pere Marquette Road.*

This road is completed from Flint to Saginaw, a distance of 35 miles. It was opened for traffic in 1862, when its earnings were \$31,764. It carried, last year, 108,957 passengers, and its earnings were \$165,197. It opens up to this road the wonderful traffic of the Saginaw Valley. The values exported from Saginaw, by water alone, have reached, in a single day, \$100,000. In 1864, there were manufactured there 529,073 barrels of salt. The export of lumber last year exceeded two hundred and sixty millions of feet. The country is equal to any in Michigan for agricultural purposes; and it continues to improve with a rapidity unrivalled by any locality in Michigan.

The Flint and Pere Marquette has been the most successful of the Congressional land grant roads, and unless an entirely new policy shall be adopted in reference to them all, it will unquestionably be the first that will be completed, probably to the straits of Mackinac. It will traverse some of the best counties in the State. Our connection with it cannot but be mutually advantageous, and highly conducive to the prosperity of both companies.

#### 2. *Flint and Holly Road.*

This road connects the Flint and Pere Marquette with the Detroit and Milwaukee at Holly. Its length is 17 miles. It is capitably built and stocked, and is understood to have proved a highly satisfactory investment to its shareholders. Its stock is reported to be mostly in first hands. (18)

#### 3. *Detroit and Milwaukee Road.*

The Detroit and Milwaukee road will be crossed about four miles south-east of Corunna. The saving in distance, via Port Huron, is so great that considerable business may reasonably be anticipated at this point. Thus, the distance to Suspension Bridge, via Detroit, is 301 miles, or to Buffalo, 325 miles; while, via Port Huron, it is but 262 miles to Suspension Bridge, or, taking the Grand Trunk to Buffalo, only 278 miles, showing an advantage to this road, going and returning, of 94 miles, or nearly one-third of the distance to Buffalo, and of 78 miles to Suspension Bridge. These facts cannot but influence the currents of travel and traffic. Our road will connect this with its collateral, the Sarnia branch of the Great Western, by the shortest route, and thus naturally tend to improve the present narrow margin on both these investments.

#### 4. *Jackson and Lansing Roads.*

At Lansing, this road will find the Jackson and Lansing road in operation thence to Jackson, where it meets branches of the Southern, extending to Toledo. Its length is 35 miles. The matter of distance again must largely influence the course of its main current of business. From Lansing to Suspension Bridge, via this road to Detroit, is 341 miles, or to Buffalo, 365 miles. By Port Huron, it is 292 miles to the Bridge, or to Buffalo, 308 miles. The saving in distance by this route, going and returning, will therefore be 98 miles to the Bridge, and to Buffalo, 116 miles; and along more than two-thirds of this road the difference in distance will be in favor of the Port Huron route for all eastward bound travel. It passes through a rich section of country, only partially developed, but rapidly improving, and it must form an important adjunct to the prosperity of our State capital, while adding essentially to the convenience of an extensive section of the interior of the State. It can hardly prove otherwise than a paying investment, and will be a most desirable connection to the new through line.

#### 5. *Amboy and Lansing Road.*

This is the southern extension of what is popularly termed in Michigan the "Ramshorn" road, from Lansing via Albion on the Central, and Jonesville on the Southern road, to Amboy on the Indiana State line.

Albion being distant 20 miles *west* of Jackson, and equi-distant from Lansing, the differences in distance are by so much the more favorable for the Port Huron route. From Jonesville to Buffalo, via Toledo, is 365 miles; via this route, 361 miles. A considerable division of this road is graded. It is reported to have lately passed into the hands of English capitalists, who will extend it southward to Jeffersonville, Ia., and northward from Owosso to Traverse Bay.

#### 6. *Jackson and Grand River Valley Road.*

This is an enterprise already in a state of forwardness sufficient to permit us to anticipate its early completion. It extends from Jackson to Eaton Rapids, in Eaton county, intersects our line at Hastings, in Barry county, and terminates at Grand Rapids. It will accommodate a section of the interior unsurpassed in agricultural resources, and by its connections at Jackson will open up Western Michigan to the traffic of Toledo and Cincinnati. It is possible that it may be the first, and for some time the only direct feeder to our road from Grand Rapids, and the region to the northward.

#### 7. *Grand Rapids and Indiana Road.*

The intersection of this road is at Otsego, a thriving town in Allegan county. It was originally intended to stretch from the Indiana State line across the Southern road at Sturgis and the Central at Kalamazoo, to Grand Rapids, and thence to Old Fort Mackinac. It is mostly graded between Sturgis and Kalamazoo, and for a distance of twenty miles northward from Grand Rapids. A portion of the iron, it is stated, has been contracted for. The completion of this road as far southward as Otsego, is manifestly essential to insure Chicago that permanent hold upon the trade of Western Michigan, to which she is obviously entitled. In connection with our own, it will increase her present very extensive and lucrative traffic with that highly productive region, and place her relations with it beyond competition from any quarter. (19)

#### **Superior Advantages in Construction.**

No proposed line of road through Michigan combines such low gradients; light structures, short distance and certain assurances of profitable local traffic as this. At the request of several localities, the Managing Director of the Grand Trunk Railway of Canada, C. J. BRYDGES, Esq., caused a survey of the various routes talked of to be made. That survey was made by FRANK SHANLY, Esq., a most accomplished and experienced Railway Engineer, during the months of August and September last. It will suffice to make an extract or two from the "Summary" of Mr. SHANLY's report:

"Reviewing the merits of the several lines west and east of Lansing, and comparing their general features with each other, I am drawn to the conclusion that a railway from Port Huron, by way of Lapeer and Flint, to Lansing, and thence via Hastings, Otsego, Paw Paw and St. Joseph to the Indiana line near Michigan City, would be, from every point of view, as desirable as, and in some respects superior to, one constructed on the other line east, and on any one of the other lines west of Lansing."

Of the structures, Mr. SHANLY says: "No heavy bridging will be required. Trestle-work and piling will meet every emergency, except in the case of the Grand river at Lansing, where, probably, three span of 100 feet each of the trussed bridges will be required." The cost of the entire work, completed in readiness for the iron and rolling stock, he estimates at only \$12,000 per mile. (20)

#### **Consolidation.**

It would seem to be manifestly for the interests of both these organizations to unite, forming a single company through Michigan. Negotiations to this end are in progress, and although, from the peculiarities of State legislation pertaining to them, there are obstacles in the way of a present consolidation, it is anticipated that these will fade away before it will be deemed indispensable to conclude negotiations for the purchase of iron and rolling stock.

## ORGANIZATION—RESOURCES.

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### Port Huron and Lake Michigan Railroad Company.

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This Company is organized under a special charter granted by the Legislature of the State of Michigan, before the framing of the new Constitution, which inhibits the granting of special franchises. The capital stock of the Company is fixed at \$8,000,000. The charter was amended in 1855, and is perpetual. It is exceedingly liberal in its provisions, conferring privileges not now conceded under the General Railroad Law. Some of these provisions may be thus condensed:

The stockholders are exempt from personal liability.

The road may be commenced any time previous to 1865, with ten years' time to complete after that date.

All the franchises of the "Northern" road are vested in this.

Land may be taken by a commission, with limited costs.

May charge the maximum rates of the "Michigan Central" road.

State tax is fixed at one-half of one per cent. to 1875, and three-fourths of one per cent. thereafter.

Legislative interference is provided against until 1885, and then requires a two-third vote.

The Company may own or hire and use steamboats, for lake and river navigation.

The Company may contract in any capacity by special agreement, so as to limit its liability as a "common carrier."

The Company has secured highly valuable and commodious depot grounds at Port Huron, with a frontage on St. Clair river of three-fourths of a mile, and a depth of twelve hundred feet. A small expenditure will complete its docks a length of twelve hundred feet. Its surveys have been completed, and the right of way secured and paid for as far as Flint, 65 miles west of Port Huron. The alignment of the road is equalled by few works of the kind in the country, there being but five curves in a distance of 65 miles, and none of them exceeding two degrees of curvature for one thousand feet in length. The maximum grade is forty feet to the mile, and this is attained on only about three miles of the line. The Company has twenty-one miles of grading completed westward from Port Huron, and thirty-five miles under contract. The remaining division, as far as Flint,

will be put under contract about the first day of May. The road bed will be completed to that point by the first day of December next. The route from Flint to Lansing will be run as near as may be on an air line, and the work placed under contract at the earliest date practicable. At least twelve miles of the road bed in Shiawassee county will be completed the present season. The ties for 56 miles of the line have been contracted for. The structures are all very light, there being only two bridges over one hundred feet in length, between Port Huron and Lansing, and only piling will be required on these.

The Company has no indebtedness, and has the means in hand to push on its work as stated above. It will be aided by municipalities along its line to the extent of five per cent. on their aggregate real and personal valuation, for which its simple debentures are to be given.

**Chicago and Michigan Grand Trunk Railway Company.**

This Company is organized under the General Railroad Law of the State of Michigan. For the following statement of its condition and financial prospects, I am indebted to its efficient Secretary, J. P. THRESHER, Esq.:

The Commissioners are, J. P. THRESHER, of Benton Harbor, Hon. F. H. STEVENS, of St. Joseph, CHANDLER RICHARDS and T. R. HARRISON, of Paw Paw, and D. M. HALL, of Otsego. The Board of Directors elected Hon. A. H. MORRISON, President; I. W. WILLARD, Vice President; J. P. THRESHER, Secretary; B. C. HOYT, Treasurer, and Hon. W. C. EDELL, Attorney. The Board also elected an Executive Committee, consisting of Hon. A. H. MORRISON, Hon. I. W. WILLARD, Hon. W. C. EDELL, and B. C. HOYT, Esq.

The amount of stock subscribed, enabling the Company to organize according to law, amounted, when the certificate of the Secretary of State was issued to the Company, to \$251,000. The amount of stock since obtained, and thought to be obtainable, on the line of the road west of Lansing, will probably amount to \$125,000. Chicago will furnish the means for constructing the line west of the Indiana State line. The amount of donations, under the act of the Legislature, authorizing municipalities to donate ten per cent. of the taxable property, and payable in six yearly instalments, and to be evidenced by seven per cent. coupon bonds, deliverable to the Company on completion of the line through the locality voting the aid, will amount to about \$700,000. A large amount of this aid has been voted, and the remaining localities are about to vote, there being no question of the result.

The Executive Committee have passed a resolution to place a portion of the line under contract, so soon as the right of way can be secured, which, in most cases, will be donated.

## APPENDIX.

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### *Note 1—Page 3.*

**GRAIN TRADE.**—The first shipment of grain from Chicago was made in 1838, and consisted of thirty-eight bags. The first shipment in bulk consisted of 1678 bushels, in 1839. The first full cargo was carried in 1840. The export rose to over one million bushels in 1845. In 1851, the entire lake trade was officially stated to equal 27,382,801 bushels, viz., 8,119,169 bushels of wheat; 7,498,264 bushels of corn; 1,591,758 bushels of barley; and 1,963,729 barrels of flour. The grain exports from Lake Michigan ports, for six years, are thus stated:

| YEAR.     | BUSHEL.    | YEAR.     | BUSHEL.    |
|-----------|------------|-----------|------------|
| 1853..... | 27,879,293 | 1861..... | 69,489,113 |
| 1859..... | 25,533,353 | 1862..... | 78,213,675 |
| 1860..... | 43,311,443 | 1863..... | 74,710,664 |

[See Andrew's report on Colonial and Lake Trade for 1852, p. 245; U. S. Census, 1860, title, Agricultural, pp. 42 and 150; Chicago in 1864, p. 9.]

## Note 2—Page 8.

TABLES—Showing the Population, area in acres, assessed value of Real and Personal Estate, acres of Land Improved and Unimproved in Farms, value of Farms, value of Farming Implements and Machinery, number of Horses, Asses and Mules, Neat Cattle, Sheep and Swine, value of Live Stock, value of Animals slaughtered, and amount of leading Agricultural Products, in six Northwestern States, in 1850 and 1860, respectively. Compiled from U. S. Census returns.

| STATES.         | Population. |           | Area in Acres. |                           | Lands Improved—Acres. |            | Unimproved Lands in Farms. |            |
|-----------------|-------------|-----------|----------------|---------------------------|-----------------------|------------|----------------------------|------------|
|                 | 1850.       | 1860.     | Total.         | Unimproved and<br>Unused. | 1860.                 | 1850.      | 1860.                      | 1860.      |
|                 |             |           |                |                           |                       |            |                            |            |
| Michigan .....  | 387,654     | 749,113   | 35,995,530     | 32,575,659                | 1,929,110             | 3,419,961  | 2,454,780                  | 3,511,861  |
| Indiana .....   | 988,416     | 1,350,428 | 31,637,760     | 13,476,043                | 5,046,548             | 8,161,717  | 7,746,879                  | 8,154,069  |
| Illinois .....  | 851,470     | 1,711,961 | 35,459,200     | 22,297,727                | 5,039,545             | 13,261,473 | 6,997,867                  | 7,993,567  |
| Wisconsin ..... | 305,391     | 776,581   | 35,840,000     | 32,093,964                | 1,045,499             | 3,746,036  | 9,131,159                  | 1,153,134  |
| Iowa .....      | 192,214     | 674,913   | 32,894,960     | 26,804,707                | 824,632               | 3,750,253  | 1,911,333                  | 5,049,136  |
| Minnesota ..... | 6,007       | 173,123   | 53,005,760     | 51,451,363                | 5,035                 | 554,397    | 23,846                     | 2,222,724  |
|                 | 2,741,153   | 5,134,409 | 213,523,200    | 190,609,463               | 13,890,414            | 32,913,737 | 21,065,913                 | 23,084,301 |

| STATES.         | Value of Farms. |                 | Value of Farm Implements and Machinery. |              | Assessed Value of Real and Personal Estate. |                 | Value of Live Stock. |               | Value of Animals Slaughtered. |              |
|-----------------|-----------------|-----------------|-----------------------------------------|--------------|---------------------------------------------|-----------------|----------------------|---------------|-------------------------------|--------------|
|                 | 1850.           | 1860.           | 1850.                                   | 1860.        | 1850.                                       | 1860.           | 1860.                | 1860.         | 1860.                         | 1860.        |
|                 |                 |                 |                                         |              |                                             |                 |                      |               |                               |              |
| Michigan .....  | \$51,972,448    | \$163,279,037   | \$2,801,371                             | \$5,835,642  | \$50,787,265                                | \$267,173,938   | \$8,003,794          | \$26,459,017  | \$1,323,237                   | \$4,090,720  |
| Indiana .....   | 126,585,775     | 344,303,770     | 6,704,444                               | 10,430,586   | 272,660,264                                 | 526,555,371     | 23,478,565           | 53,694,726    | 6,597,833                     | 15,552,323   |
| Illinois .....  | 98,133,400      | 232,531,073     | 6,405,561                               | 18,278,160   | 150,366,006                                 | 371,901,232     | 24,209,233           | 50,133,611    | 4,873,258                     | 15,139,943   |
| Wisconsin ..... | 28,132,633      | 73,111,063      | 1,641,568                               | 5,703,847    | 42,066,568                                  | 173,571,693     | 4,597,333            | 20,220,316    | 820,173                       | 2,363,710    |
| Iowa .....      | 16,337,537      | 118,741,403     | 1,172,869                               | 5,191,043    | 33,714,568                                  | 247,533,263     | 3,068,275            | 24,772,697    | 821,164                       | 4,403,463    |
| Minnesota ..... | 161,946         | 19,070,737      | 15,361                                  | 1,044,009    | (Not returned.)                             | 53,244,413      | 92,869               | 4,499,731     | 2,540                         | 732,415      |
|                 | \$289,733,937   | \$1,309,643,159 | \$13,831,794                            | \$46,545,936 | \$494,472,706                               | \$2,321,163,939 | \$63,376,066         | \$203,650,160 | \$14,612,730                  | \$37,336,976 |

## AMOUNT OF LEADING AGRICULTURAL PRODUCTS.

|                         | 1850.      | 1860.      |                 | 1850.       | 1860.       |
|-------------------------|------------|------------|-----------------|-------------|-------------|
| Horses, No. ....        | 710,033    | 1,093,738  | Orchards.....   | \$916,896   | \$3,703,384 |
| Asses & Mules, No. .... | 18,186     | 83,130     |                 |             |             |
| Neat Cattle, " .....    | 3,217,355  | 4,903,943  | Wheat, bushels. | 26,373,035  | 74,133,447  |
| Sheep, " .....          | 3,037,907  | 5,132,362  | Rye, " .....    | 369,331     | 3,064,593   |
| Swine, " .....          | 4,865,787  | 7,118,589  | Corn, " .....   | 136,915,370 | 248,760,334 |
| Wool, pounds.....       | 7,431,629  | 10,694,376 | Oats, " .....   | 23,577,916  | 43,578,898  |
| Butter, " .....         | 38,299,994 | 89,016,313 | Barley, " ..... | 467,528     | 3,086,177   |
| Cheese, " .....         | 3,314,564  | 5,505,408  | Buckwheat, " .. | 941,070     | 1,625,124   |
| Tobacco, " .....        | 1,894,568  | 14,850,007 |                 |             |             |
| Wine, gallons.....      | 19,289     | 162,712    | Total bushels.. | 178,644,134 | 374,198,573 |

## Note 3—Page 4.

LAKE COMMERCE.—As late as the year 1845, the entire tonnage of the lakes consisted of only 380 vessels of all classes, with an aggregate tonnage of 76,000 tons. The tonnage for 1851 is put by Mr. ANDREWS, in his report to the U. S. Secretary of the Treasury, p. 248, at 77,061 steam, and 138,914 sail, or an aggregate of 215,975 tons. The table below, showing the tonnage of the lakes for six years, is taken from pages 144-5 of the report by the Secretary of the Treasury, on Foreign and Domestic Commerce, for 1864.

| Year.     | No. Vessels. | Tonn.   |
|-----------|--------------|---------|
| 1858..... | 1213.....    | 331,153 |
| 1859..... | 1198.....    | 323,156 |
| 1860..... | 1216.....    | 316,503 |
| 1861..... | 1229.....    | 323,953 |
| 1862..... | 1363.....    | 361,997 |
| 1863..... | 1643.....    | 413,020 |

The same Report gives the following statement of the value of produce of all classes shipped from Lake Michigan ports in 1862:

|                    |                     |
|--------------------|---------------------|
| From Chicago.....  | \$57,854,333        |
| " Milwaukee.....   | 20,787,336          |
| " Other Ports..... | 2,590,685           |
|                    | <u>\$81,232,354</u> |

It also gives a statement, in bushels, of the total grain movement eastward from all lake ports for same years:

|           |             |
|-----------|-------------|
| 1856..... | 57,707,769  |
| 1857..... | 44,769,851  |
| 1858..... | 59,872,566  |
| 1859..... | 44,354,225  |
| 1860..... | 78,652,436  |
| 1861..... | 119,264,233 |
| 1862..... | 136,339,543 |

The summary of values transported eastward, during the latter year, is set down at \$522,526,103. [See Rep. For. & Dom. Com., pp. 136, 151, 178.]

## Note 4—Page 5.

[See Census 1860, title Agriculture, p. 166.] It must be noted that this was the case after the Erie Canal, of New York, had been enlarged and refitted, with the express purpose of carrying the produce of the West, and was supplied with *five thousand* canal boats. It transported, in 1863, the year named, 3,150,000 tons to tide-water. The entire foreign commerce of the United States, the same year, was 3,931,072 tons. The tonnage transported by the four great lines of railway was 6,018,452. [Rep. For. & Dom. Com., 1864, p. 119. U. S. Census 1860, p. 166.]

## Note 5—Page 5.

The following table shows the percentage of receipts at the western termini of the roads named, for six years:

| ROADS.                           | 1857 | 1858 | 1859 | 1860 | 1861 | 1862 |
|----------------------------------|------|------|------|------|------|------|
| Baltimore & Ohio.....            | 5.3  | 6.5  | 5.7  | 3.4  | 3.0  | 2.9  |
| Pennsylvania Central.....        | 4.3  | 6.0  | 4.2  | 3.9  | 4.1  | 4.4  |
| New York & Erie, at Dunkirk..... | 4.4  | 3.4  | 5.6  | 4.2  | 3.8  | 4.3  |

Yet the total tonnage of these three great thoroughfares, for 1863, was—

|                           |           |
|---------------------------|-----------|
| New York & Erie.....      | 1,632,955 |
| Pennsylvania Central..... | 1,732,064 |
| Baltimore & Ohio.....     | 1,200,000 |
| Total.....                | 4,565,019 |

Nothing could more strikingly illustrate the magnitude of our domestic commerce, than that such an immense volume of freight flows over these roads, and yet that it comprises so small a percentage of the grain trade of the Northwest, and none of the resulting return traffic from the seaboard. Nor does it include the coal trade. [For. & Dom. Com., p. 178.]

## Note 6—Page 6.

CHICAGO.—It will be interesting to note the growth and progress of Chicago, particularly since the opening of her first line of railway to the east, in 1852. I quote from "Chicago in 1864," and "Trade and Commerce of Chicago," 1865:

| Years.    | Population. | Years.    | Population. |
|-----------|-------------|-----------|-------------|
| 1852..... | 38,784      | 1859..... | 90,000      |
| 1853..... | 60,662      | 1860..... | 109,263     |
| 1854..... | 65,873      | 1861..... | 120,000     |
| 1855..... | 80,028      | 1862..... | 137,030     |
| 1856..... | 86,000      | 1863..... | 150,000     |
| 1857..... | 93,000      | 1864..... | 169,353     |
| 1858..... | 80,000      | 1865..... | 178,000     |

## SHIPMENT OF FLOUR (REDUCED TO WHEAT) AND GRAIN, FROM CHICAGO FOR TWENTY EIGHT YEARS.

| Years.    | Wheat,<br>bu. | Corn,<br>bu. | Oats,<br>bu. | Rye,<br>bu. | Barley,<br>bu. | Total,<br>bu. |
|-----------|---------------|--------------|--------------|-------------|----------------|---------------|
| 1838..... | 78            | ....         | ....         | ....        | ....           | 78            |
| 1839..... | 2,678         | ....         | ....         | ....        | ....           | 2,678         |
| 1840..... | 10,000        | ....         | ....         | ....        | ....           | 10,000        |
| 1841..... | 40,000        | ....         | ....         | ....        | ....           | 40,000        |
| 1842..... | 586,907       | ....         | ....         | ....        | ....           | 586,907       |
| 1843..... | 688,907       | ....         | ....         | ....        | ....           | 688,907       |
| 1844..... | 923,494       | ....         | ....         | ....        | ....           | 923,494       |
| 1845..... | 1,024,630     | ....         | ....         | ....        | ....           | 1,024,630     |
| 1846..... | 1,599,619     | ....         | ....         | ....        | ....           | 1,599,619     |
| 1847..... | 2,136,994     | 67,135       | 33,892       | ....        | ....           | 2,243,201     |
| 1848..... | 2,286,000     | 566,460      | 65,230       | ....        | ....           | 3,001,740     |
| 1849..... | 2,192,809     | 644,348      | 26,849       | 31,453      | ....           | 2,769,111     |
| 1850..... | 1,387,989     | 262,013      | 186,054      | 22,572      | ....           | 1,839,938     |
| 1851..... | 799,330       | 3,221,317    | 606,837      | 19,997      | ....           | 4,646,291     |
| 1852..... | 941,470       | 2,757,011    | 2,030,317    | 127,028     | 17,315         | 5,873,141     |
| 1853..... | 1,680,908     | 2,780,253    | 1,748,493    | 120,275     | 82,162         | 6,412,181     |
| 1854..... | 2,744,880     | 6,537,399    | 3,229,987    | 148,421     | 41,153         | 12,932,320    |
| 1855..... | 7,110,270     | 7,547,678    | 1,888,533    | 92,039      | 20,132         | 16,538,700    |
| 1856..... | 9,419,365     | 11,129,658   | 7,014,547    | 19,051      | 590            | 21,563,221    |
| 1857..... | 10,783,222    | 6,814,615    | 316,773      | 17,993      | ....           | 18,032,678    |
| 1858..... | 10,909,343    | 7,493,212    | 1,493,134    | 127,008     | 7,569          | 20,032,166    |
| 1859..... | 10,759,359    | 4,317,654    | 1,174,177    | 478,162     | 131,449        | 16,753,795    |
| 1860..... | 16,054,379    | 13,743,172   | 1,039,779    | 156,642     | 290,211        | 31,256,697    |
| 1861..... | 22,913,830    | 24,186,383   | 1,655,394    | 422,492     | 135,293        | 49,263,381    |
| 1862..... | 22,902,765    | 29,452,610   | 3,112,666    | 871,796     | 532,195        | 56,477,110    |
| 1863..... | 17,925,336    | 24,444,147   | 7,574,994    | 835,133     | 668,735        | 50,549,345    |
| 1864..... | 16,312,819    | 12,557,926   | 14,588,697   | 793,703     | 262,145        | 44,515,289    |
| 1865..... | 11,390,453    | 24,643,153   | 9,533,065    | 830,227     | 431,913        | 47,441,811    |

## SCHEDULE OF GRAIN WAREHOUSES IN CHICAGO.

|                               |           |                    |           |
|-------------------------------|-----------|--------------------|-----------|
| Sturges, Buckingham & Co., A. | 700,000   | Armour, Dole & Co. | 800,000   |
| do. do. B.                    | 700,000   | Munger & Armour,   | 600,000   |
| Flint & Thompson              | 1,250,000 | Hiram Wheeler,     | 500,000   |
| do                            | 750,000   | Chas. Wheeler,     | 500,000   |
| Munn & Scott.                 | 1,250,000 | L. Newberry        | 300,000   |
| do                            | 700,000   | Geo. Sturges,      | 75,000    |
| do                            | 600,000   | O. Lunt & Bro.     | 80,000    |
| do                            | 200,000   |                    |           |
| Armour, Dole & Co.            | 850,000   | Total bushels.     | 9,865,000 |

## MANUFACTURE OF FLOUR IN CHICAGO FOR SIX YEARS.

| Year. | Bbls.   | Year. | Bbls.   |
|-------|---------|-------|---------|
| 1865. | 299,890 | 1862. | 260,980 |
| 1864. | 255,058 | 1861. | 291,852 |
| 1863. | 236,261 | 1860. | 232,000 |

## SHIPMENTS OF FLOUR FOR FOURTEEN YEARS.

| Year. | Bbls.   | Year. | Bbls.     |
|-------|---------|-------|-----------|
| 1862. | 61,190  | 1859. | 696,960   |
| 1863. | 74,190  | 1860. | 713,339   |
| 1864. | 103,627 | 1861. | 415,865   |
| 1865. | 163,419 | 1862. | 1,739,849 |
| 1866. | 216,389 | 1863. | 1,536,691 |
| 1867. | 256,648 | 1864. | 1,153,496 |
| 1868. | 436,281 | 1865. | 1,022,527 |

The receipts of flour, during the year 1865, were 1,186,561 barrels, against 1,141,791 barrels received in 1864, and 1,474,284 barrels received in 1863.

## STATEMENT OF GRAIN EXPORTS OF ODESSA AND OF ALL RUSSIA, FROM 1857 TO 1862, INCLUSIVE, FURNISHED BY THE U. S. CONSUL AT ODESSA.

| Grain, in bu.     | From Odessa. | From all Russia. |
|-------------------|--------------|------------------|
| Wheat.            | 36,003,080   | 119,383,752      |
| Rye.              | 6,645,792    | 53,479,296       |
| Barley.           | 11,498,028   | 24,338,544       |
| Oats.             | 13,647,172   | 53,404,544       |
| Corn.             | 12,040,842   | 13,271,592       |
| Flour and Meal.   | 1,101,744    | 5,766,780        |
| Total             | 80,936,608   | 269,644,508      |
| Average per year. | 13,489,434   | 44,940,751       |

## IMPORTS AT CHICAGO FOR 1863 AND 1864, AS REPORTED AT U. S. CUSTOM HOUSE.

|                                | 1863.       | 1864.       |
|--------------------------------|-------------|-------------|
| Lumber, feet.                  | 392,800,000 | 480,165,000 |
| *Shingles, feet.               | 152,435,000 | 183,360,000 |
| Lath, feet.                    | 41,665,000  | 63,905,000  |
| *Square Timber.                | 5,000,000   | 4,940,000   |
| Cedar Posts, pcs.              | 558,520     | 576,971     |
| Railroad Ties, pcs.            | 369,282     | 447,325     |
| Telegraph Poles.               | 19,102      | 37,465      |
| Shingle Bolts and Staves, cds. | 9,442       | 11,849      |
| Bark, cds.                     | 9,338       | 12,350      |
| Fire Wood, cds.                | 98,517      | 140,577     |
| Dry Goods, pkgs.               | 6,474       | 19,328      |
| Hardware, pkgs.                | 55,257      | 102,162     |
| Stoves, pcs.                   | 38,017      | 125,017     |
| Coal, tons.                    | 244,624     | 251,038     |
| *Liquors, casks.               | 17,743      | 9,985       |
| Glass and Glassware, bxs.      | 26,880      | 36,619      |
| Crockery, crates.              | 4,840       | 6,329       |
| Apples and Fruit, pkgs.        | 179,738     | 113,659     |
| Fish, bbls.                    | 56,729      | 85,770      |
| *Sugar, hhds.                  | 12,458      | 7,131       |
| Sugar, bbls.                   | 49,983      | 51,418      |
| *Syrup and Molasses, casks.    | 23,679      | 14,950      |
| *Salt, bbls.                   | 775,057     | 975,649     |
| *Salt, sacks.                  | 179,182     | 30,404      |
| *Salt, tons.                   | 7,017       | 782         |
| Groceries, pkgs.               | 163,276     | 175,993     |

Of articles marked with a \* the import in 1863 was larger.

## BEEVES PACKED IN CHICAGO FOR FOURTEEN YEARS.

| Season.      | No. Packed. | Season.      | No. Packed. |
|--------------|-------------|--------------|-------------|
| 1852-53..... | 24,669      | 1859-60..... | 51,809      |
| 1853-54..... | 25,431      | 1860-61..... | 25,209      |
| 1854-55..... | 22,691      | 1861-62..... | 55,212      |
| 1855-56..... | 23,972      | 1862-63..... | 42,163      |
| 1856-57..... | 14,987      | 1863-64..... | 70,086      |
| 1857-58..... | 34,675      | 1864-65..... | 92,459      |
| 1858-59..... | 45,506      |              |             |

## HOGS PACKED IN CHICAGO AND CINCINNATI FOR FOURTEEN SEASONS.

| Season.      | Chicago. | Cincinnati. | Season.      | Chicago. | Cincinnati. |
|--------------|----------|-------------|--------------|----------|-------------|
| 1852-53..... | 48,156   | 361,000     | 1859-60..... | 157,518  | 434,499     |
| 1853-54..... | 52,849   | 421,000     | 1860-61..... | 231,335  | 433,790     |
| 1854-55..... | 73,694   | 355,786     | 1861-62..... | 514,118  | 474,160     |
| 1855-56..... | 80,380   | 405,396     | 1862-63..... | 970,204  | 608,457     |
| 1856-57..... | 74,000   | 344,512     | 1863-64..... | 904,658  | 370,623     |
| 1857-58..... | 99,262   | 446,677     | 1864-65..... | 750,147  | 350,500     |
| 1858-59..... | 185,000  | 382,826     |              |          |             |

## RECEIPTS OF LUMBER, SHINGLES, LATH, ETC., IN CHICAGO FOR FOURTEEN YEARS.

| Years.    | Lumber, feet. | Shingles, No. | Lath, No.  |
|-----------|---------------|---------------|------------|
| 1855..... | 615,020,000   | 275,000,000   | 62,555,000 |
| 1856..... | 480,165,000   | 133,860,000   | 63,805,000 |
| 1857..... | 393,074,832   | 152,435,632   | 41,665,000 |
| 1858..... | 239,365,000   | 131,225,000   | 23,830,000 |
| 1859..... | 249,309,000   | 79,356,000    | 32,667,000 |
| 1860..... | 255,147,000   | 133,573,000   | 90,509,000 |
| 1861..... | 236,710,832   | 165,087,000   | 49,548,000 |
| 1862..... | 268,618,000   | 125,783,000   | 44,517,000 |
| 1863..... | 444,396,300   | 130,462,000   | 79,650,000 |
| 1864..... | 441,961,900   | 135,376,000   | 79,235,120 |
| 1865..... | 297,537,669   | 153,770,000   | 46,487,550 |
| 1866..... | 228,336,783   | 82,061,250    | 32,431,550 |
| 1867..... | 202,101,098   | 93,433,784    | 39,033,116 |
| 1868..... | 147,816,233   | 77,080,500    | 19,759,670 |

## RECEIPTS AND SHIPMENTS OF HOGS AND BEEF CATTLE FOR ELEVEN YEARS.

| Years.    | Hogs Rec'd. | Hogs Shipped. | Beef Cattle Rec'd. | Beef Cattle Shipped. |
|-----------|-------------|---------------|--------------------|----------------------|
| 1855..... | 302,068     | 145,580       | 10,715             | 8,253                |
| 1856..... | 293,625     | 281,540       | 21,950             | 22,502               |
| 1857..... | 251,115     | 131,216       | 48,524             | 25,502               |
| 1858..... | 530,009     | 176,868       | 118,151            | 43,149               |
| 1859..... | 281,496     | 212,840       | 90,574             | 35,973               |
| 1860..... | 355,354     | 156,294       | 155,753            | 104,122              |
| 1861..... | 675,002     | 280,094       | 204,579            | 124,146              |
| 1862..... | 1,348,896   | 491,135       | 209,655            | 112,745              |
| 1863..... | 1,900,519   | 810,453       | 298,381            | 293,217              |
| 1864..... | 1,582,047   | 701,854       | 336,637            | 179,520              |
| 1865..... | 876,573     | 599,049       | 333,362            | 242,766              |

## RECEIPTS AND SHIPMENTS OF HIDES FOR EIGHT YEARS.

| Years.    | Received lbs. | Forwarded lbs. |
|-----------|---------------|----------------|
| 1858..... | 11,206,997    | 8,693,832      |
| 1859..... | 12,635,446    | 16,413,320     |
| 1860..... | 11,233,918    | 14,863,518     |
| 1861..... | 9,962,723     | 12,277,512     |
| 1862..... | 12,747,123    | 15,315,369     |
| 1863..... | 17,567,728    | 23,781,979     |
| 1864..... | 19,524,409    | 18,561,395     |
| 1865..... | 18,133,515    | 22,744,918     |

## RECEIPTS AND SHIPMENTS OF SEEDS FOR TEN YEARS.

| Years.    | Received lbs. | Forwarded lbs. |
|-----------|---------------|----------------|
| 1855..... | 2,024,238     | 2,484,013      |
| 1856..... | 2,843,202     | 2,323,759      |
| 1857..... | 2,466,973     | 1,437,948      |
| 1858..... | 4,271,732     | 4,027,846      |
| 1859..... | 5,241,547     | 4,647,960      |
| 1860..... | 7,071,074     | 6,035,563      |
| 1861..... | 7,742,614     | 7,435,455      |
| 1862..... | 8,176,349     | 6,136,221      |
| 1863..... | 9,886,208     | 7,754,666      |
| 1864..... | 10,224,598    | 8,755,739      |
| 1865..... | 12,633,836    | 7,329,089      |

## RECEIPTS OF SALT AT CHICAGO FOR SEVEN YEARS.

| Year.     | Barrels. | Bags.      | Tons in bulk. |
|-----------|----------|------------|---------------|
| 1865..... | 809,884  | 133,923    | 5,558         |
| 1864..... | 675,649  | 29,414     | 782           |
| 1863..... | 773,037  | 179,132    | 7,007         |
| 1862..... | 604,916  | 278,789    | 13,047        |
| 1861..... | 300,478  | (in sacks) | 2,218         |
| 1860..... | 255,143  | .....      | .....         |
| 1859..... | 316,291  | .....      | .....         |

## RECEIPTS AND SHIPMENTS OF WOOL FOR ELEVEN YEARS.

|           | Received. | Shipped.  |
|-----------|-----------|-----------|
| 1865..... | 1,943,415 | 2,158,483 |
| 1866..... | 1,863,920 | 675,906   |
| 1867..... | 1,116,821 | 1,062,321 |
| 1868..... | 1,083,626 | 1,038,674 |
| 1869..... | 918,319   | 934,325   |
| 1860..... | 859,248   | 839,369   |
| 1861..... | 1,184,308 | 1,360,617 |
| 1862..... | 1,523,571 | 2,101,514 |
| 1863..... | 2,831,934 | 3,435,967 |
| 1864..... | 4,304,388 | 7,564,379 |
| 1865..... | 7,670,687 | 8,621,255 |

WHOLESALE TRADE OF CHICAGO.—The proportions of the mercantile jobbing business of Chicago, may be judged by the following reports of sales for 1865:

|                            |              |
|----------------------------|--------------|
| Wholesale Clothing.....    | \$12,000,000 |
| “ Grocery.....             | 40,000,000   |
| “ Millinery and Straw..... | 5,000,000    |
| “ Dry Goods.....           | 36,000,000   |
| “ Boots and Shoes.....     | 15,000,000   |
| “ Hats and Caps.....       | 6,000,000    |
| “ Hardware.....            | 6,000,000    |

The Galena and Chicago Union Railroad was the first leading into Chicago from the west. In 1852, it carried flour and grain equal to 1,658,725 bushels, and in 1863, the amount equalled 11,395,649 bushels. This road was commenced in 1849. There are now *eight* main lines of railway leading into Chicago from the west and south. One of the reports, from which the foregoing statistics have been compiled, contains the following suggestive paragraph:

“Illinois, Iowa, Wisconsin and Minnesota, the northern half of Missouri, and the yet undeveloped region lying west of the Missouri, are the sources upon which Chicago must depend for her future growth and prosperity, and all those enterprises which either lay that region under contribution or propose to do so, should be industriously fostered and encouraged. Already Chicago is the greatest primary grain market in the world, and second to none in respect to her packing interests. And yet, but 15,000,000 of the 35,000,000 of acres in Illinois, 8,000,000 of the 50,000,000 of acres in Iowa, 8,000,000 of the 50,000,000 of acres in Wisconsin, 3,000,000 of the 40,000,000 of acres in Minnesota, 3,000,000 of the 37,000,000 of acres in Missouri, and not more than 2,000,000 of the hundreds of millions of acres in the vast territory west of the Missouri river are under cultivation.”

GROWTH OF THE WEST.—The West has continued to progress steadily and rapidly since the last U. S. census was taken in 1860. It was predicted in some quarters, and feared in others, that the war would check the progress of the country at large, and especially of the Northwest; and when the war closed, many persons reasoned that railroad stocks would no longer be so valuable, and must fall in the market. The Government had employed the railroads in transporting its soldiers and munitions, said these people; now that the Government ceases to be a customer, railroads must make far smaller dividends. But others, wiser, replied: The soldiers were carried at half price; as citizens, they will travel as much in the course of a year, and pay full fare; also, the Government paid only the lowest rates of freight, but the surplus it consumed during the war will still have to be brought to market, and will pay higher rates. Therefore, the railroads will, as a rule, make more on the return of peace than during the war. This reasoning is manifestly correct; and it holds good in other matters as well. For instance, the enormous demand for transportation on the western rivers greatly increased the steamboat tonnage there. The St. Louis

*Republican* tells us, that steamboats are more numerous, and generally of a finer class, than they were before the rebellion. The St. Louis and New Orleans tonnage, now over forty thousand tons, is thirty-three per cent. greater than that of 1859. The Ohio river tonnage has increased fifty per cent. during the same period. The Missouri river tonnage has increased fifty per cent., and large additions have been made to the number of boats on all the upper rivers. Small steamboats have especially increased in the last five years. And yet these added tons are now usefully and fully employed upon our western waters, in the vast internal commerce which has recommenced with peace.

The tide of emigration from the older States has not ceased to roll westward during the last thirty years; and the war made no diminution in our foreign emigration. That from Great Britain, in 1864, was larger than it had been in either of the ten years preceding, and included about 30,000 English, 6000 Scotch, and 94,000 Irish. From nearly all parts of the old world the emigration, for 1866, is assuming extraordinary proportions. In Switzerland the papers advocate special organizations to assist in the forwarding of emigrants, as the only means of avoiding the calamities of pauperism. In Germany every country will furnish an unusually large quota. In Mecklenburgh-Schwerin over one thousand males left from one small county. The reports from Hamburg and Bremen state that all steamers, during the whole winter, have been crowded with passengers; and news reaching us from England asserts, in the most positive terms, that large numbers of sturdy English workmen are preparing themselves for emigrating this spring to America. Agents and shipping houses aver, that in the year 1866, the number of emigrants arriving on our shores will exceed that of half a million of sound, healthy and industrious men.

How much room is left for emigrants, may be inferred from the following paragraph from a recent work, entitled "Climatology of the United States": "The assertion may at first appear unwarranted, but it is demonstrable that an area, not inferior in size to the whole United States east of the Mississippi, now almost wholly unoccupied, lies west of the 98th meridian, and above the 43d parallel, which is perfectly adapted to the fullest occupation by cultivated nations." Another writer attempts to give a conception of the size of "The West," by comparison, thus: "Illinois would make forty such States as Rhode Island, and Minnesota sixty. Missouri is larger than all New England. Ohio exceeds either Ireland or Scotland, or Portugal; and equals Belgium, Scotland and Switzerland together. Missouri is more than half as large as Italy, and larger than Denmark, Holland, Belgium and Switzerland. Missouri and Illinois are larger than England, Scotland, Ireland and Wales." And the United States land offices show where the tide of emigration sets. During only the months of August, September and October last, there were taken, under the Homestead Act, at the land office at La Crosse, Wisconsin, 16,419 acres of land. The Commissioner of the General Land Office states that at one land office in Missouri, during the month of December last, 25,250 acres were taken up for actual settlement, and cash land sales made at the same office, for the same period, amount to \$3262. At the office at Brownsville, Missouri, there were taken for actual settlement, in December, 27,726 acres, besides cash land sales made, amounting to 2664 acres. Over 1000 acres were sold at \$2.50; the land thus sold being known as the alternate reserved railroad sections. The last returns from the Fort Dodge land office, in Iowa, show that in August 4438 acres were taken up at that office for settlement. At Topeka, Kansas, during December, there was taken up, with Agricultural College scrip, 12,320 acres, and upwards of 2200 acres were actually settled upon under the Homestead law. 7585 acres of public lands are reported to have been taken up for actual settlement during the month of September, at the land office in Minneapolis, Minn. 3000 acres were taken up at Denver, Colorado, during the same month.

The census of the United States is taken decennially, alternating with a

census in most of the States. The returns of the Northwestern States for 1865, compare as follows with those already given:

| States.        | 1860.          | 1865.     |
|----------------|----------------|-----------|
| Michigan.....  | 749,113        | 803,745   |
| Indiana.....   | 1,350,423 est. | 1,560,728 |
| Illinois.....  | 1,711,951      | 2,250,000 |
| Wisconsin..... | 775,881        | 861,847   |
| Iowa.....      | 674,913        | 749,000   |
| Minnesota..... | 172,123        | 248,848   |

I cannot more appropriately close this lengthy note on the progress of the Northwest and of its Queen City, than by quoting a brief article from the "Flour and Grain Reporter," of a recent date, setting forth the extraordinary productiveness of the youngest in this group of States:

"Minnesota, near the headwaters of the Mississippi, seems to enjoy peculiarities of climate and soil pre-eminently fitted for the growth of cereals. Even among the States of the West she is unequalled in productiveness. So early as 1860, her wheat crop amounted to over five million bushels—an amount greater than that raised in all the New England States. But this was in the infancy of the State; the crop of 1865 will reach twelve million bushels.

"The average to the acre for 1865 was twenty-seven bushels; compare this measure of productiveness with the best average of other Western States, and it will at once be confessed that Minnesota is the crown State of the Mississippi valley. In Ohio the largest crop ever grown (that of 1850) only yielded seventeen and one-third bushels to the acre, while the average for ten years was twelve and a half bushels. In Iowa, which is generally considered one of the richest agricultural States in the West, the crops do not average more than fourteen bushels, while in New York and the New England States the yield is about forty per cent less.

"This yield of grain is enormous when you take into consideration the fact that there are not more than two hundred and fifty thousand inhabitants in Minnesota. Forty-eight bushels of wheat for every inhabitant, man, woman and child.

"The valley of the Nile, in Egypt's palmiest days, could not boast of more than this.

"The superior quality of Minnesota wheat is shown in the weight of the grain and its suitability for milling purposes. It weighs from sixty-two to seventy pounds to the bushel, while in Ohio and Pennsylvania it averages from fifty-five to sixty.

"Immense quantities of wheat have accumulated in the southern and western sections of the State, owing to the low stage of water in the Minnesota River for the last three years. Great loss has been sustained by reason of sweating and rotting. One operator alone, who has about one hundred and fifty thousand bushels on hand, will lose at least fifty thousand dollars, and many smaller speculators in proportion. When the Minnesota Valley Railroad is finished, the difficulty of getting grain to market will be easily obviated. It is expected that this road will be finished by the next harvest, so that there is no likelihood of a repetition of these losses.

"The export of wheat for this year already amounts to about seven millions of bushels. Next year it will probably be much larger, as the stock on hand is very large, and the means of transportation will be increased double. Capitalists have constructed spacious warehouses along the lines of the different railroads in operation, and to be in operation next year, and are now engaged in filling them with grain to their utmost capacity. Farmers draw their wheat to these warehouses from a distance of one hundred miles, and think themselves lucky if they get sixty cents a bushel for their produce. The expense attending the transportation of grain to market is nearly double what it is in any other State, but the producer finds the wheat crop a most remunerative one notwithstanding."

#### Note 7—Page 7.

**RAILWAYS VS. WATER.**—On page 149 of the report on Foreign and Domestic Commerce for 1864, by the U. S. Secretary of the Treasury, the amount of flour shipped by rail from Chicago is stated at 672,961 barrels, or more than one-half of the whole. The following is a contrast, furnished by that report, of the shipments by rail and lake in that year:

| Articles.            | By Rail.   | By Lake.  |
|----------------------|------------|-----------|
| Cattle.....          | 108,569    | 735       |
| Hogs, live.....      | 445,976    | 449       |
| Hogs, dressed.....   | 44,609     |           |
| Beef, bbls.....      | 127,493    | 22,345    |
| Pork, bbls.....      | 83,814     | 108,735   |
| Cut meats, lbs.....  | 71,615,797 | 225,000   |
| Lard, lbs.....       | 54,612,206 | 34,120    |
| Tallow, lbs.....     | 8,095,531  | 335,000   |
| Hides, lbs.....      | 10,360,719 | 4,851,920 |
| Wool, lbs.....       | 1,950,604  | 132,480   |
| Lead, lbs.....       | 4,793,745  | 1,878,000 |
| Seeds, lbs.....      | 4,530,551  | 1,459,875 |
| Highwines, bbls..... | 67,533     | 17,551    |

The preponderance of railway carriage in these articles is very great; pork, beef, whisky, hides, wool and lead being carried largely by lake, and pork only in excess over the carriage by railways.

## Note 8—Page 7.

**DETROIT CONVENTION.**—The Detroit Convention was the largest and most influential gathering of commercial men ever assembled. Its proceedings fill a volume of 276 pages. They were essentially commercial in scope, and resolutions were adopted favoring the construction of the Niagara Ship Canal and the enlargement of the Erie Canal. The proposed limits of this publication will not permit extracts from the speeches, showing the total inadequacy of existing means of transportation to meet the necessities of the West. But the fact that such a convention assembled, and unanimously recommended the opening of two such gigantic and costly thoroughfares, would seem to dispel all questions as to the amount of thorough business ready to find its way over our roads.

In March, 1865, **JUNCAN STEWART, Esq.**, a leading commercial citizen of Detroit, published in the *Free Press* of that city, a series of articles on the "Sufferings of the West for the Want of Sufficient Transportation Facilities." A single extract will show the pressure at only one of the principal points of transit on existing routes:

"The first question that arises, is, what is the present state of transportation between the Western States and the seaboard? I am, most fortunately, in a position to answer the inquiry, and, for reasons already stated, the people of the West are in the proper frame of mind to feel the full force of the answer.

"*Twenty thousand tons of freight are waiting shipment in the city of Detroit to-day, that cannot be sent forward for want of the means of transportation, even at the present exorbitant rates of freight—rates ruinous to the interests of the purchaser. The means are utterly inadequate to the task—utterly incapable of carrying forward this vast accumulation. This twenty thousand tons is simply the surplus that cannot be sent forward after all the facilities for transportation have been exhausted. There is to-day detained at various points on the lines running from the West to the seaboard, for the same reason, not less than one hundred and fifty thousand tons of freight. I know of one road connecting with this city that has fourteen thousand tons in its cars and warehouses at the other end of its line, because its connections cannot either receive or transport it at present, being themselves, if I may use the expression, bound up with the business already on hand. Another line has over six thousand tons that it cannot send forward—one-half of it in cars of other lines that cannot even be unloaded, because its storage capacity is exhausted, and there the cars stand, a silent but convincing monument of the folly and recklessness of those who would contract and destroy one of our western outlets to the seaboard.*

"Here we have at least fifty thousand tons, at and from this point, that cannot be moved for some time to come. Some of this freight was sent forward last December, and early in the month at that. Millions upon millions will be lost, owing to this delay."

## Note 9—Page 7.

**DETROIT RIVER.**—An examination of the files of the Detroit city papers, for any given series of years, would show how frequent and protracted are the stoppages in the transit of the Detroit river. In the *Detroit Tribune*, of January 6 last, occurs the following item:

"Owing to the immense quantities of ice in the river, the ferry boats find it a somewhat difficult matter to perform their regular trips. Should the present cold weather continue we may, in a few days at the farthest, look for the river being sealed up entirely."

And the *Free Press*, of February 10, thus cheerfully hails the removal of one of "the icy embargoes" frequent at that point:

"The icy embargo which has lain upon the river, was removed yesterday by the softening influences of the mild atmosphere that followed the snow storm of the day previous, and the ferry boats are out and at their wonted work, a fact which will be hailed with satisfaction by those who have business upon the other side."

The Superintendent of the Michigan Southern Railroad, in his report for 1863, thus speaks of the embarrassments regularly experienced by that company during the winter, for the want of adequate easterly connections:

"We have again to refer to the detention, of which we had reason to complain in our last report, of eastward-bound freight at Toledo and Detroit. Our easterly connections not taking through freight as fast as we were prepared to deliver it, has constantly thrown back upon us an accumulation of freight which has repeatedly obliged us to issue circulars declining for a stated period to receive through freight at any of our stations. These facts plainly indicate the necessity for additional outlets eastward during the recess of navigation for the increasing products of the great and growing West."

In one of the series of articles just quoted from, Mr. STEWART further shows that the Southern route is too much overburdened to afford any relief to the winter embarrassments at Detroit:

"Some may argue that we have a winter outlet by the South Shore Railroad, *via* Toledo. We have *absolutely no outlet* for freight in that direction, and even very little passenger accommodation, except standing room. So overcrowded were the cars on that road during the late passport panic, that business men preferred paying the cost of a descriptive list of their own features, rather than go round by the south shore. The roads centering in Toledo could furnish with ease four times the quantity of freight the South Shore Road could transport, and the result was, that the Michigan Southern and Northern Indiana Railroad crowded as much tonnage on the Grand Trunk line, as the latter would consent to receive, because it could not move its receipts at Toledo over its own connecting line. This served to decrease very largely the transportation facilities of Northern and Central Michigan, and was a most serious drawback to the earnings of the Michigan Central, and Detroit and Milwaukee Railroads, and all their connections. \* \* \* Michigan has no outlet during the winter months except through Canada, and it is high time that the farmers and business men of the State gave some heed to this undeniable fact. Country merchants are well aware that their business has been sadly crippled this winter, because the farmers could not market their wheat, for the reason that millers could not send forward their flour, and had in consequence to stop their mills. So was it with all other branches of trade depending on transportation eastward. Millers, coopers and laborers are idle. Our country towns and villages lack their usual bustling activity—and the streets of Detroit are now duller on week days, on account of the general depression, than they are on Sundays when trade is good."

It is sufficiently evident that the "close connections" of the Michigan Central and the Detroit and Milwaukee roads, with the Great Western, make it impossible for the Grand Trunk to control much of the *paying* traffic poured into Detroit over those lines; and that there is, therefore, practically but one winter outlet eastward from that city, and that one liable to frequent interruptions. At Port Huron, on the other hand, the Sarnia branch of the Great Western and the Grand Trunk will afford abundant and reliable facilities, and by independent routes, to all parts of New York, New England and Canada. Nor, it would seem, are the citizens of interior Michigan, whose business is liable any winter to be "sadly crippled," less interested than through shippers, in providing a guard against accumulations of freight in "our commercial emporium."

The Detroit *Free Press*, in December last, spoke as follows of the press of business upon the Central and Southern roads:

"More Room.—The increasing business and traffic of the great West cry out continually for better accommodations. The largest and best of our railroads are inadequate to the work required of them. Freight lays over all along the line, at this season especially, when, just as navigation is about to close, the multitudinous products of our great Western granaries are striving to reach the Eastern market. Even on the Central Road, well stocked as it is, a double track is needed the entire length; but the want is not felt here alone, the cry comes up from every quarter."

"The Hudson *Gazette* complains of the railroad accommodations for the storage of freight at that place, and the necessity of rolling stock to carry it off, and calls loudly on the Superintendent to grant them relief."

"The agitation of this matter, as seen in the proposed meetings of Western producers and business men, reference to which has lately appeared in our columns, in connection with the letters of Mr. Aspinall, will not fail to devise the necessary ways and means to accommodate these increasing wants of the West."

The *Commercial Advertiser*, of the same city, is of opinion that the Western States will be driven into extensive manufacturing enterprises, from sheer inability to effect requisite exchanges of their produce with the East:

"As long as the people of the Northwest can profitably exchange their products for Eastern manufactures, they will do so; albeit the necessity of more attention to the encouragement of diversified labor in all its forms, is beginning to occupy a good deal of the attention of the people in this region. It is not unlikely that in the course of the next twenty years, hundreds of millions of dollars will be invested in manufactures for which we are now entirely dependent upon New England, New York and Pennsylvania. The cheapness of the various articles of raw material, of breadstuffs and provisions at the West, will exert an important influence in building up manufactures in our midst, and rendering us less dependent upon the workshops of the East. Abundant facilities for cheap transportation is the only policy which can prevent the growing population of the Lake States from going extensively into manufactures. Let our neighbors in the Eastern States duly consider this subject."

Note 10—Page 11.

CAPITAL INTERESTED.—Andrews' Report, pages 293 and 300, gives the following list of public works, and their cost, constructed prior to 1851 in

New York and New England; in the former State as "avenues of the trade between the East and the West," and in the latter for "securing to Boston the trade of the basin of the St. Lawrence and the West":

## NEW YORK.

|                                         |              |
|-----------------------------------------|--------------|
| Hudson River.....                       | \$12,000,000 |
| Harlem.....                             | 4,873,317    |
| Utica & Schenectady.....                | 4,143,918    |
| Albany & Schenectady.....               | 1,740,449    |
| Syracuse & Utica.....                   | 2,570,891    |
| Rochester & Syracuse, (both lines)..... | 6,464,363    |
| Buffalo & Rochester.....                | 2,228,976    |
| Rochester & Niagara Falls.....          | 1,600,000    |
| Oswego & Syracuse.....                  | 588,768      |
| Rome & Watertown.....                   | 1,500,000    |
| Sacketts Harbor & Ellisburgh.....       | 350,000      |
| New York & Erie.....                    | 26,000,000   |
| Canandaigua & Niagara Falls.....        | 3,500,000    |
| Buffalo, Corning & N. Y.....            | 2,000,000    |
| Buffalo & New York City.....            | 1,500,000    |
| Albany & Susquehanna.....               | 4,350,000    |
| Erie & Champlain Canals.....            | 85,000,000   |

\$110,410,681

## NEW ENGLAND.

|                              |                        |
|------------------------------|------------------------|
| Western.....                 | \$9,953,758            |
| Boston & Lowell.....         | 1,945,646              |
| Lowell & Nashua.....         | 651,214                |
| Concord.....                 | 1,485,000 <sup>1</sup> |
| Northern.....                | 2,768,000              |
| Vermont Central.....         | 8,500,000              |
| Fitchburgh.....              | 3,612,486              |
| Vermont & Massachusetts..... | 3,450,004              |
| Cheshire.....                | 2,777,843              |
| Rutland.....                 | 4,500,000              |
| Vermont & Canada.....        | 1,500,000              |
| Ogdensburgh & Northern.....  | 5,200,000              |

\$46,343,951

Here is an aggregate of investments of nearly one hundred and fifty-seven millions of dollars, every dollar of it predicated upon the business of the West. If to this be added the cost of the Grand Trunk to Portland, and of the Great Western from Sarnia to Suspension Bridge, we shall find an aggregate of over two hundred and sixty millions of dollars. And since it appears that the two lines of railway through Michigan are totally inadequate to the demands upon them at Chicago, and through the interior of this State, it follows that *this entire capital invested*, vast as it is, is directly interested in having constructed, at the earliest practicable period, this line of railway to Port Huron. In view of the large expenditures by Boston, in her efforts to secure direct trade with the West, it is remarkable that this route has not long since attracted the attention of her enterprising and sagacious capitalists. Open it, and the Western, the Ogdensburgh, the Vermont Central, and the lines from Portland will all largely increase their traffic, which would naturally centre in Boston. Every bushel of grain transported from Buffalo to New York is taxed about six cents per bushel; every barrel of flour is taxed about twenty-three cents, and every barrel of pork twenty-four cents, as toll for the privilege of passing through the Erie canal. The *Boston Commercial Bulletin*, of a recent date, contained an article upon the subject, from which the subjoined paragraph is taken:

"That our Western transportation companies can lay down freight here as cheap as at any other point, is demonstrated by the fact that at the time of the practical consolidation of the connecting Northern lines via Ogdensburgh, a competition was developed between them and the Western route, which, for a while, gave Boston the advantage over New York. The effect of this was immediately seen here in a large increase of both inward and outward freight, and many Western dealers were induced to come to this market for stocks of goods, who had never ventured further East than New York before. We believe the experience of some of them upon that occasion, in regard to the policy of buying domestic manufactures at the point of production, has since led to a frequent repetition of that visit."

Note 11—Page 12.

**MICHIGAN.**—Table, showing the Population, Acres of Improved Lands, Cash value of Farms and Farming Implements, Agricultural and Mineral Products, Manufactures and Fisheries in the State of Michigan for the years 1850, 1860 and 1864, respectively. Compiled from Census Returns.

|                                | 1850.        | 1860.         | 1864.         |
|--------------------------------|--------------|---------------|---------------|
| Population.....                | 397,965      | 751,110       | 803,745       |
| Acres of Improved Lands.....   | 1,930,354    | 3,589,442     | 3,647,645     |
| Bushels Wheat raised.....      | 4,893,141    | 8,171,688     | 9,687,627     |
| do other Grain.....            | 8,196,678    | 17,788,759    | 15,202,528    |
| Number Horses.....             | 57,841       | 137,551       | 179,083       |
| do Neat Cattle.....            | 270,083      | 492,924       | 503,670       |
| do Sheep.....                  | 756,382      | 1,266,380     | 2,053,363     |
| do Swine.....                  | 202,588      | 366,572       | 459,556       |
| Wool, clip, pounds.....        | 2,007,598    | 3,929,113     | 7,249,924     |
| Butter do.....                 | 7,056,478    | 15,498,047    | 13,836,452    |
| Sugar do.....                  | 2,426,087    | 3,973,730     | 4,044,399     |
| Cheese do.....                 | 1,112,646    | 1,610,097     | 1,580,945     |
| Barrels Flour.....             | 784,684      | 1,786,289     | 1,319,923     |
| Lumber manufactured, feet..... | 801,157,500  | 795,606,699   | 800,000,000   |
| Copper, tons.....              | .....        | 6,233         | 13,689        |
| Iron, tons.....                | 655          | 130,000       | 273,000       |
| Coal, pounds (1864).....       | 120,000      | .....         | 27,089,143    |
| Plaster, do.....               | 8,000,000    | .....         | 80,000,000    |
| Salt, barrels.....             | .....        | 4,000         | 529,073       |
| Cash value Farms.....          | \$51,914,644 | \$162,713,267 | \$210,583,609 |
| do do Farm Implements.....     | 2,748,311    | .....         | 5,799,744     |
| do do Live Stock.....          | 7,862,550    | 23,618,468    | 33,065,841    |
| do do Flour.....               | 3,031,976    | .....         | 6,572,136     |
| do do Lumber.....              | 2,221,698    | 6,891,769     | 8,363,550     |
| do do other Manufactures.....  | 10,111,488   | 33,063,071    | .....         |
| do do Mineral Products.....    | .....        | 3,026,682     | 6,980,372     |
| do do Salt shipped.....        | .....        | .....         | 1,190,410     |
| do do Fishery Products.....    | .....        | .....         | 250,467       |
| do do Orchard do.....          | 130,522      | 1,116,219     | 1,635,000     |
| Real and Personal Estate.....  | .....        | 294,294,538   | .....         |

Note 12—Page 12.

**Condensed Statement of the Business of the Michigan Central Railroad, from 1852 to 1865, inclusive. Compiled from Reports of the Company.**

| Years ending      | Number of Way<br>Passengers. | Number Through<br>Passengers. | Total number of<br>Passengers. | Number tons of<br>Freight moved. | Gross Earnings. | Operating Dis-<br>counts In-<br>cluding Taxes. | Net Earnings. |
|-------------------|------------------------------|-------------------------------|--------------------------------|----------------------------------|-----------------|------------------------------------------------|---------------|
| May 31, 1852..... | 133,972                      | 87.227%                       | 221.199%                       | 123,127                          | \$1,069,947     | \$404,747                                      | \$665,200     |
| May 31, 1853..... | 170,059%                     | 77.432%                       | 247.552                        | 161,226                          | 1,153,660       | 566,721                                        | 586,938       |
| May 31, 1854..... | 245,028                      | 112.908                       | 367.936                        | 216,560                          | 1,579,412       | 903,944                                        | 675,466       |
| May 31, 1855..... | 345,138%                     | 153.635%                      | 503.774                        | 241,825                          | 2,215,383       | 1,335,627                                      | 879,656       |
| May 31, 1856..... | 389,510                      | 161.270                       | 550.730                        | 281,293                          | 2,800,442       | 1,693,509                                      | 1,206,933     |
| May 31, 1857..... | 406,600%                     | 187.029%                      | 593.630                        | 323,939                          | 3,104,612       | 2,083,199                                      | 1,021,403     |
| May 31, 1858..... | 307,272                      | 154.684%                      | 461.966%                       | 276,294                          | 2,428,757       | 1,531,219                                      | 897,539       |
| May 31, 1859..... | 269,358                      | 92.169                        | 361.527                        | 235,123                          | 1,838,129       | 1,072,782                                      | 765,346       |
| May 31, 1860..... | 251,755                      | 72.666%                       | 324.421%                       | 295,276                          | 1,832,944       | 1,077,486                                      | 755,461       |
| May 31, 1861..... | 262,665                      | 65.110                        | 327.775                        | 378,570                          | 2,055,052       | 1,197,724                                      | 920,328       |
| May 31, 1862..... | 253,536%                     | 55.232                        | 308.823%                       | 469,112                          | 2,361,241       | 1,149,152                                      | 1,212,088     |
| May 31, 1863..... | 337,673                      | 59.669%                       | 447.361%                       | 564,827                          | 2,946,560       | 1,278,359                                      | 1,647,200     |
| May 31, 1864..... | 556,208%                     | 59.552%                       | 645.769                        | 542,410                          | 3,434,548       | 1,720,125                                      | 1,714,423     |
| May 31, 1865..... | 745,345%                     | 107.540%                      | 852.889                        | 455,275                          | 4,145,419       | 2,406,149                                      | 1,739,269     |

*Comparative Statement of Receipts for Freight, Local and Through, of the Michigan Central Railroad, for six years. Compiled from Reports of the Company.*

| Years.    | EAST.     |           | WEST.     |           |
|-----------|-----------|-----------|-----------|-----------|
|           | Local.    | Through.  | Local.    | Through.  |
| 1860..... | \$295.715 | \$210.878 | \$275.374 | \$180.652 |
| 1861..... | 414.552   | 339.796   | 279.920   | 193.917   |
| 1862..... | 512.198   | 636.087   | 241.748   | 169.026   |
| 1863..... | 599.368   | 815.258   | 307.979   | 261.150   |
| 1864..... | 532.413   | 779.071   | 377.887   | 333.902   |
| 1865..... | 655.974   | 598.065   | 432.221   | 497.267   |

The President of this Company, in his report for 1865, alludes with much satisfaction to the steady increase of the local traffic of the road: "It is most satisfactory to note the steady increase of our local traffic, and its increasing diversity of character, rendering us less and less dependent upon a few employments or a few products, thus giving a greater uniform certainty to our business. A few years ago, we were largely dependent upon the wheat crop for our prosperity; last year, the earnings from wheat and flour were less than the year before, and our local freight shows an increase of thirty per cent, and our local passengers an increase of forty-eight per cent." In his report for the same year, the Superintendent makes the following comparison of the increase over 1864 in the different branches of traffic:

|                                       |              |
|---------------------------------------|--------------|
| Increase from Through Passengers..... | 30 per cent. |
| "    from Way Passengers.....         | 43 "         |
| "    from Through Freight.....        | 6 "          |
| "    from Way Freight.....            | 25 "         |
| "    from Miscellaneous.....          | 41 "         |

The large increase in Local Passengers may be attributed, in a measure, to the movement of troops to places of rendezvous, and those on their way to the field; but the gain, the Superintendent says, "has been principally in the regular business of the line, as the policy has been to cultivate the home business, affording all reasonable facilities for its accommodation."

*Comparative Statement of Movement and Earnings of Freight on the Michigan Southern Railroad, from 1855 to 1864, inclusive. Compiled from Reports of the Company.*

| Years ending           | Through. |           | Way.    |           | Total Through and Way. |           | Earnings per Ton per Mile. |       |
|------------------------|----------|-----------|---------|-----------|------------------------|-----------|----------------------------|-------|
|                        | Tons.    | Earnings. | Tons.   | Earnings. | Tons.                  | Earnings. | Through.                   | Way.  |
|                        |          |           |         |           |                        |           |                            |       |
| December 31, 1855..... | 49,116   | \$284,577 | 143,184 | \$492,757 | 192,300                | \$777,335 | cts.                       | cts.  |
| December 31, 1856..... | 68,121   | 440,558   | 163,698 | 519,318   | 231,814                | 959,877   | 2,369                      | 3,065 |
| December 31, 1857..... | 51,621   | 297,041   | 183,183 | 506,730   | 234,804                | 803,762   | 2,440                      | 2,676 |
| December 31, 1858..... | 54,730   | 263,772   | 206,893 | 583,329   | 261,613                | 847,102   | 2,360                      | 3,176 |
| February 28, 1860..... | 105,238  | 376,790   | 241,012 | 671,682   | 346,300                | 1,048,473 | 1,966                      | 3,339 |
| March 1, 1861.....     | 137,690  | 481,568   | 260,939 | 760,302   | 398,679                | 1,241,871 | 1,411                      | 3,439 |
| March 1, 1862.....     | 183,139  | 657,293   | 269,569 | 733,219   | 452,708                | 1,390,512 | 1,410                      | 3,412 |
| March 1, 1863.....     | 246,633  | 933,561   | 296,994 | 832,573   | 543,626                | 1,766,134 | 1,516                      | 3,309 |
| March 1, 1864.....     | 243,905  | 1,098,659 | 315,074 | 887,868   | 558,979                | 1,981,527 | 1,536                      | 3,406 |

*Comparative Statement of the Passenger Traffic, Local and Through, of the Michigan Southern Railroad, for two years. Compiled from Reports of the Company.*

| Years.    | Number Passengers. |         | Earnings. |           |
|-----------|--------------------|---------|-----------|-----------|
|           | Through.           | Way.    | Through.  | Way.      |
| 1863..... | 66,197             | 320,585 | \$359,186 | \$421,786 |
| 1864..... | 96,350             | 480,482 | 513,792   | 613,496   |

In a review of the report to the stockholders of the Michigan Southern Railroad, the *Merchants' Magazine*, for November, contains some remarks which, from the importance to be attached to their source, are worthy of note:

"Few roads in the United States are better equipped than this one. Stations, store-houses, piers, etc., are abundantly supplied, and all that conduces to facilitate the movement of goods and passengers has been sedulously attended to by those in charge of the works. The increase of rolling stock from year to year is shown in tabular form, but numbers alone (1460) cannot express the full measure of the increase. We must also take into consideration the increased power of the engines and capacity of the cars, which have nearly doubled within the past ten years. The facilities of the road, indeed, are ample for a very large increase of its present business.

"It is now wholly relieved from debt, and for the last two fiscal years has been able to pay ten per cent. interest on its guaranteed stock, and for the last year seven per cent. on its common stock. Five years ago, the common stock of this company sold heavily at from 7½ to 12, and the guaranteed stock at 17 to 24. In March last, the first was selling at 62½ to 70, and had sold as high as 118½, and the latter was selling at 135 to 140, and had sold at 166."

The following table from the *Western Railroad Gazette* shows the earnings and expenses of the Michigan Southern Railroad during the past eleven months:

|                                              | 1865.       | 1865.       | Increase.      |
|----------------------------------------------|-------------|-------------|----------------|
| Earnings .....                               | \$4,413,581 | \$3,923,104 | \$490,377      |
| Expenses .....                               | 2,443,520   | 2,176,338   | 272,182        |
| Net.....                                     | \$1,968,061 | \$1,746,766 |                |
| Eleven months' increase in net earnings..... |             |             | \$218,995      |
| Net earnings eleven months.....              |             |             | \$1,965,061 85 |

**DETROIT AND MILWAUKEE RAILROAD.**—From the annual report of this road the *Detroit Post* makes the following comparative statement of the receipts and expenditures during the last five years:

| Years.    | Receipts.     | Working Expenses. | Percentage on Gross Receipts. |
|-----------|---------------|-------------------|-------------------------------|
| 1861..... | \$ 738,362 74 | \$402,943 38      | 54.54                         |
| 1862..... | 866,726 20    | 453,848 21        | 52.33                         |
| 1863..... | 1,026,069 49  | 581,039 22        | 56.62                         |
| 1864..... | 1,323,402 73  | 834,226 72        | 63.03                         |
| 1865..... | 1,691,735 35  | 989,570 96        | 55.54                         |

| Years.    | Total Revenue Expenditure. | Percentage on Gross Receipts. | Net Revenue Balance. |
|-----------|----------------------------|-------------------------------|----------------------|
| 1861..... | \$ 420,593 40              | 56.93                         | \$318,264 34         |
| 1862..... | 481,179 53                 | 55.43                         | 335,546 87           |
| 1863..... | 621,034 70                 | 60.52                         | 405,024 79           |
| 1864..... | 884,753 54                 | 66.84                         | 438,644 19           |
| 1865..... | 1,000,750 70               | 59.15                         | 690,984 65           |

The receipts of 1865 show an increase over those of 1864 of \$368,332.62, or 27.83 per cent., while the working expenses are 7.49 per cent. less than the preceding year.

This increase of traffic is believed to be the natural result of the growth of the vast region of country watered by the Saginaw river and its tributaries, and of the population and material wealth along the line generally, as well as of the large crops and favorable markets of the past year. The former cannot fail to be a constantly augmenting source of traffic; and while the latter is more subject to fluctuation, it may reasonably be expected that the progress of improvement and the opening of new farms, will always counterbalance any slight contingencies, and thus keep up and gradually increase the revenue of the line.

## Note 13—Page 13.

*Comparative Statement of the Area in Square Miles, the Population in 1850 and 1864, and of the aggregate Real and Personal Valuation in 1851 and 1864, of the Counties in Michigan respectively intersected by the Southern, Central and proposed lines of Railway. Compiled from State and National Census Returns for those years.*

| COUNTIES.                         | AREA.      | POPULATION. |         | VALUATION.   |              |
|-----------------------------------|------------|-------------|---------|--------------|--------------|
|                                   | Sq. miles. | 1850.       | 1864.   | 1851.        | 1860.        |
| <b>SOUTHERN LINE.</b>             |            |             |         |              |              |
| Monroe.....                       | 547        | 14,695      | 22,321  | \$960,344    | \$4,261,283  |
| Lenawee.....                      | 738        | 26,380      | 40,302  | 2,358,059    | 11,366,040   |
| Hillsdale.....                    | 608        | 16,159      | 27,324  | 2,898,240    | 6,246,351    |
| Branch.....                       | 576        | 12,472      | 22,458  | 837,289      | 4,902,948    |
| St. Joseph.....                   | 530        | 12,717      | 21,796  | 1,088,920    | 5,825,865    |
| Totals.....                       | 2,999      | 82,423      | 134,001 | \$6,237,852  | \$32,602,487 |
| <b>CENTRAL LINE.</b>              |            |             |         |              |              |
| Wayne.....                        | 600        | 42,765      | 83,326  | \$3,833,213  | \$23,508,940 |
| Washtenaw.....                    | 720        | 28,569      | 34,050  | 2,517,427    | 10,160,430   |
| Jackson.....                      | 720        | 19,433      | 25,905  | 1,516,459    | 7,052,680    |
| Calhoun.....                      | 720        | 19,169      | 30,488  | 1,637,347    | 7,083,900    |
| Kalamazoo.....                    | 576        | 13,179      | 25,842  | 1,098,192    | 5,789,662    |
| Van Buren.....                    | 620        | 5,804       | 17,820  | 541,663      | 2,591,499    |
| Cass.....                         | 504        | 10,906      | 17,776  | 841,411      | 3,913,881    |
| Berrien.....                      | 600        | 11,417      | 25,720  | 775,038      | 4,545,862    |
| Totals.....                       | 5,060      | 151,342     | 260,927 | \$12,755,750 | \$64,641,854 |
| <b>PORT HURON AND L. M. LINE.</b> |            |             |         |              |              |
| St. Clair.....                    | 948        | 16,411      | 27,591  | \$977,261    | \$3,996,840  |
| Lapeer.....                       | 720        | 7,026       | 15,247  | 406,400      | 2,137,307    |
| Genesee.....                      | 720        | 12,031      | 22,042  | 735,109      | 4,025,930    |
| Shiawassee.....                   | 576        | 5,233       | 13,465  | 411,666      | 2,566,282    |
| Ingham.....                       | 564        | 8,643       | 17,123  | 588,387      | 2,748,990    |
| Totals.....                       | 3,528      | 43,344      | 95,469  | \$3,118,823  | \$15,475,349 |
| <b>CHICAGO AND MICH. LINE.</b>    |            |             |         |              |              |
| Eaton.....                        | 576        | 7,058       | 16,497  | \$519,614    | \$2,798,315  |
| Barry.....                        | 576        | 5,072       | 14,483  | 409,769      | 2,140,720    |
| Allegan.....                      | 849        | 5,127       | 18,849  | 488,677      | 2,980,325    |
| Van Buren.....                    | 620        | 5,804       | 17,820  | 541,663      | 2,591,491    |
| Berrien.....                      | 600        | 11,417      | 25,720  | 775,038      | 4,545,862    |
| Totals.....                       | 3,212      | 34,478      | 93,369  | \$2,734,761  | \$15,051,713 |
| Add Pt. H. & L. M.....            | 3,528      | 43,344      | 95,469  | 3,118,823    | 15,475,349   |
| Totals.....                       | 6,740      | 77,822      | 188,838 | \$5,853,584  | \$30,527,062 |

*Condensed Statement of the number of Acres of Taxable Land, number of Acres of Improved Lands, Agricultural Products, number of Live Stock, number of Flour and Saw-Mills, with their products, together with the Capital invested in other Manufactures, and their annual product for 1864, in the Counties intersected by the Port-Huron and Lake Michigan and the Chicago and Michigan Railway Lines. Compiled from the State Census for 1864.*

| Port Huron & Lake Mich. Line. | St. Clair County. | Lapeer County. | Genesee County. | Shiawassee County. | Ingham County. | Total.     |
|-------------------------------|-------------------|----------------|-----------------|--------------------|----------------|------------|
| Acres of Taxable Land...      | 282,188           | 304,589        | 279,921         | 263,276            | 239,508        | 1,369,482  |
| Improved Land...              | 66,746            | 78,439         | 95,341          | 64,913             | 83,690         | 389,129    |
| Bushels of Wheat raised...    | 102,307           | 168,715        | 117,826         | 109,301            | 181,302        | 679,351    |
| other Grains...               | 211,464           | 120,551        | 180,665         | 76,236             | 110,063        | 698,969    |
| Pounds of Wool...             | 68,730            | 176,113        | 289,018         | 134,188            | 206,540        | 874,589    |
| Pork...                       | 153,873           | 462,832        | 470,158         | 332,172            | 442,273        | 1,891,306  |
| Butter...                     | 401,175           | 367,765        | 435,568         | 336,134            | 320,670        | 1,861,312  |
| Cheese...                     | 22,474            | 49,229         | 41,348          | 27,329             | 52,842         | 193,222    |
| Number of Horses...           | 4,743             | 3,815          | 4,787           | 2,888              | 4,530          | 20,693     |
| Neat Cattle...                | 17,305            | 13,098         | 15,494          | 11,537             | 14,496         | 71,920     |
| Sheep...                      | 26,325            | 52,171         | 80,444          | 43,187             | 63,734         | 266,861    |
| Swine...                      | 6,884             | 6,080          | 7,261           | 5,827              | 8,388          | 34,440     |
| Flouring Mills...             | 8                 | 14             | 13              | 5                  | 5              | 45         |
| Barrels of Flour...           | 6,215             | 16,300         | 28,300          | 19,926             | 5,950          | 76,991     |
| Saw Mills...                  | 28                | 41             | 26              | 12                 | 21             | 128        |
| Lumber sawed (feet)...        | 39,117,500        | 10,119,000     | 16,878,826      | 1,105,000          | 1,198,300      | 64,418,086 |
| Other Manufactures, capital   | 10,579,900        | 39,750         | 30,475          | 49,850             | 32,350         | 10,672,225 |
| Value of Manufactures...      | 115,500           | 43,100         | 42,700          | 65,630             | 64,395         | 331,435    |

| Chicago and Michigan Line.  | Eaton County. | Barry County. | Allegan County. | Van Buren County. | Berrien County. | Total.     |
|-----------------------------|---------------|---------------|-----------------|-------------------|-----------------|------------|
| Acres of Taxable Land...    | 321,930       | 258,990       | 270,399         | 301,305           | 334,761         | 1,487,385  |
| Improved Land...            | 77,380        | 84,380        | 72,090          | 83,751            | 99,122          | 416,723    |
| Bushels of Wheat raised...  | 165,454       | 272,386       | 210,454         | 295,135           | 341,363         | 1,184,792  |
| other Grains...             | 108,079       | 88,127        | 79,882          | 77,477            | 110,657         | 464,162    |
| Pounds of Wool...           | 202,438       | 130,719       | 65,515          | 56,583            | 53,421          | 508,676    |
| Pork...                     | 470,158       | 480,819       | 602,795         | 1,345,227         | 2,524,193       | 5,423,192  |
| Butter...                   | 434,027       | 352,369       | 380,058         | 361,228           | 336,112         | 1,863,794  |
| Cheese...                   | 66,961        | 33,019        | 45,907          | 60,992            | 43,865          | 250,744    |
| Number of Horses...         | 3,708         | 3,537         | 3,551           | 3,960             | 5,935           | 20,691     |
| Neat Cattle...              | 15,040        | 12,559        | 14,556          | 11,233            | 13,848          | 67,296     |
| Sheep...                    | 66,161        | 43,236        | 21,262          | 18,529            | 18,975          | 165,163    |
| Swine...                    | 9,162         | 8,802         | 8,256           | 11,364            | 18,006          | 55,590     |
| Flouring Mills...           | 9             | 8             | 11              | 7                 | 19              | 54         |
| Barrels of Flour...         | 8,250         | 11,500        | 19,959          | 16,000            | 102,408         | 158,108    |
| Saw Mills...                | 24            | 27            | 54              | 39                | 68              | 212        |
| Lumber sawed (feet)...      | 2,982,000     | 4,298,500     | 33,338,500      | 11,895,000        | 16,691,000      | 69,096,000 |
| Other Manufactures, capital | 14,150        | 11,975        | 120,350         | 45,000            | 82,120          | 273,595    |
| Value of Manufactures...    | 22,984        | 9,250         | 155,450         | 62,700            | 129,460         | 379,844    |

*Note 14—Page 14.*

The most satisfactory information as to the superiority of the harbor at St. Joseph, is embodied in a report made upon the subject by Col. T. J. CRAM, of the U. S. Corps of Topographical Engineers, under whose supervision the harbor was built several years since, and put in repair last season. In a report (unofficial), dated September 7, 1865, Col. CRAM says:

"Although it cannot be reasonably supposed that the formation of deposits or bars of sand shall be prevented, still, experience since 1843 has shown that when the piers have been in good order, the deposits or bars in the lake have invariably been in such directions, shapes and positions, so that no obstruction to the entrance or departure of vessels has been experienced for a draft of fourteen feet. In this respect, St. Joseph has much the advantage over any other port on the lake. No artificial dredging has ever been required here, nor will there ever be any necessity for dredging on the outer bar to maintain a direct channel of the foregoing draft out into the lake. From the Three Rivers down to the mouth of the St. Joseph, a distance of one hundred and twenty-two miles, we shall find the average fall of the river to be one and eight-tenths of a foot per mile. This necessarily gives a strong current to the river, which, with the large volume of water flowing through it, gives a momentum at the mouth sufficient always to preserve a good and direct channel through the sand deposit into the lake. And so long as the piers are kept up at the mouth in sufficient extent in their present direction, not only will this beautiful harbor be one well adapted to all the business

that can by any possible means be concentrated there, but it serves as an excellent harbor of refuge, at all times, for this part of the lake. In this respect, the harbor of St. Joseph is of immense value to the commerce of Lake Michigan. From the foregoing facts, the capacity of the mouth of this river for harbor purposes may be rightly judged of great value.

"During the present season, (1865), the North Pier has been thoroughly repaired by new timbers, and the cribs well filled with stones, under the direction of Col. T. J. Cram, U. S. Engineer Corps; and it is in contemplation to repair the South Pier where needed; also, to extend the South Pier for two hundred feet beyond its present limit. Out of the existing appropriation, sufficient funds remain to complete this contemplated work. The proposed extension of two hundred feet of the South Pier will, if constructed, give the current of the river at the mouth a deflection more direct out into the lake. With the repair to the South Pier, and this extension, the harbor will be in an excellent condition for refuge at all times as well as for the immediate commerce of the place. The cost of all that is contemplated, for the repair and extension, is estimated at about seven thousand dollars.

"DISTANCES ACROSS LAKE MICHIGAN.

|                                   |           |
|-----------------------------------|-----------|
| "From St. Joseph to Chicago ..... | 61 miles. |
| " " " Waukegan .....              | 79 "      |
| " " " Kenosha .....               | 73½ "     |
| " " " Racine .....                | 76½ "     |
| " " " Milwaukee .....             | 96 "      |
| " " " Sheboygan .....             | 126 "     |

"At Chicago, Racine, Milwaukee and Sheboygan, there are good harbors, all recently put in excellent condition, and all, except Sheboygan, having an abundance of water, and railroads in successful operation, westward to the Mississippi. That from Sheboygan is only completed twenty-two miles, and requires twenty miles more to be made before it connects with the general system of railroads in extensive operation in Wisconsin."

RACINE & MISSISSIPPI RAILROAD OFFICE,  
RACINE, Sept. 4, 1865.

A. H. MORRISON, Esq.,  
President C. & M. G. T. Railway :

DEAR SIR,—After consideration of the intended plan of constructing a railroad from Port Huron to St. Joseph, I regard the project with much interest, believing it will afford a connection of great importance to the railroads in which I am interested. I hand you a map of the Western Union Railroad, which is to embrace, under re-organization, the present Racine and Mississippi, and Western Illinois Railroads. The extension of the Northern Illinois on the Mississippi gives us a very strong hold on the business of Iowa and Minnesota. By steamboat from this place to St. Joseph, we can make the Eastern connection proposed of very great value.

I shall be pleased to be informed of your progress from time to time, and shall be glad to consider any points of mutual interest which you can present to me.

I am, yours truly,

G. A. THOMPSON,

General Manager R. & M. R. R. and  
President of the Northern Illinois R. R.

RACINE & MISSISSIPPI RAILROAD.—The Racine (Wisconsin) *Journal* says, that on the 18th ultimo, the Racine and Mississippi Railroad was sold at public auction by the United States Marshal, and was bid off by Mr. G. A. THOMPSON for the sum of \$1,000,000.

This road will be consolidated with the Northern Illinois Railroad, under the title of the Western Union Railroad, for which purpose precedent agreements had been made. Together, these roads complete a great through line, from Lake Michigan at Racine, to the Mississippi at Savannah, and extending thence along the bank of the river to Fulton, Port Byron and Rock Island. As yet, the extension is open only to Fulton, but is also nearly ready for traffic to Port Byron, where it will connect with a branch of the Chicago and Rock Island Railroad, and thus enter Rock Island city.

The future of such a road, says the New York *Financial Chronicle*, is not obscure. Though literally enveloped by powerful competing lines, the road will be a success.

MILWAUKEE & PRAIRIE DU CHIEN RAILWAY,  
GENERAL MANAGER'S OFFICE,  
MILWAUKEE, Wis., Sept. 5, 1865.

HON. A. H. MORRISON,  
*President C. & M. G. T. R. W. Co.*

DEAR SIR,—Mr. Stevens, of St. Joseph, has requested my opinion as to whether, in the event of a railroad being built from Port Huron to Chicago, it would be an advantage to such road in securing business from the Northwest to strike some lake port on the route. I think there can be no question, but that if a great through Eastern route, as yours proposes to be, should strike some point on the lake having a good harbor, and run a line of propellers to Milwaukee, it would get a large and profitable freight business, which will increase as we extend our lines into Iowa and Minnesota. The road I manage has already a line fifty miles beyond the Mississippi, which it is contemplated to extend to Minnesota and to the Missouri river. We need more facilities to get our products to the East, and will watch with interest any project which will help to another outlet.

With much respect,  
J. C. SPENCER,  
*General Manager.*

CHAMBER OF COMMERCE,  
MILWAUKEE, October 3, 1865.

HON. A. H. MORRISON,  
*President C. & M. G. T. Railway Co.,  
St. Joseph, Michigan:*

DEAR SIR,—The letter from your Secretary was read before this Board on the 30th ult., and I am directed by a unanimous vote to communicate to you the very deep interest which the business men of Milwaukee feel in the construction of the projected line of railway from Port Huron to St. Joseph, as proposed, and to say that you will not only have the earnest good wishes of Milwaukee in conducting this enterprise to a successful termination; but you may also rely, when the work is completed, upon a large and constantly increasing amount of business from this city. Our only practicable outlet during the winter and early spring months, the Detroit and Milwaukee Railway, is even now incapable of carrying away half the freight which accumulates here after the close of navigation, and which would be shipped by rail if proper facilities were offered. Our wholesale merchants with gladly hail the completion of your road to St. Joseph, because, if for no other reasons, it will open to them a rich section of country to which they now have no access. The action of this Board in expressing an earnest desire to see the proposed road built to St. Joseph, between which place and Milwaukee steamboat navigation is practicable nearly the entire year round, may therefore be taken as an expression of the sentiments of all classes of our mercantile community, though representing mainly the produce trade. We feel assured that there is no other point at which the proposed road can touch the lake, so eligibly located for securing a large traffic from Milwaukee, as St. Joseph.

Wishing the enterprise the most complete success, I have the honor to be, sir,

Your obedient servant,  
WM. J. LANGSON,  
*Secretary Milwaukee Chamber Commerce.*

ST. JOSEPH—WESTERN MICHIGAN.—The following extract of a letter to the writer from the Secretary of the Chicago and Michigan Railway Company, gives some interesting details as to the present and prospective

importance of St. Joseph, and also valuable information relative to the country along the line of that road:

"HON. W. L. BANCROFT:

"ST. JOSEPH, Feb. 6, 1866.

"DEAR SIR,—I take much pleasure in replying to your favor of a recent date, and will give you such information on the points suggested as my limited time will permit. The harbor here is of great importance to this railway, for it is preferable to all others on the lake; the Paw Paw and the St. Joseph rivers serving at all times to maintain great depth of water. The harbor is open earlier and later in the season than any other on the east shore of the lake. It is always safe and ample. Large quantities of black walnut, whitewood, oak, pine and other lumber are annually shipped from here to Chicago, New York, and in some instances direct to Europe. Prior to the construction of the Michigan Central Railroad, twenty-five miles south of this port, to Chicago, this was the principal transshipping port between the East and West, and the boats plying the rivers brought here large quantities of freight for shipment. A line of steamers is again to be operated on the St. Joseph to Niles, and possibly to South Bend, Ind. This will make tributary to this port the entire country traversed by this noble stream, and which eastern capitalists are considering the practicability of improving as a part of a ship canal from Lake Michigan to Lake Erie—a project that the Buffalo Commercial urges and says, "the scheme for a canal up the St. Joseph, and thence to Monroe, is an old and a practical one." The road will secure here a large carrying trade, in the way of salt, plaster, fish and fruit, destined southward to be distributed throughout Indiana and Illinois, via railway lines that the road intersects on the route to Chicago; and the produce that these various lines will bring to the Chicago and Michigan division of the canal will be over estimated. The New Albany and Salem Railroad, now in operation from the Ohio river to Michigan City, will, it is thought, be extended to St. Joseph; for a small sum will prepare the road bed, and no amount of money will be likely to make a permanent and safe harbor at Michigan City. The line of railroad now being constructed between Peru and Plymouth, Ind., and which, by contract, is to be consolidated with lines now built, both north and south, will, it is thought, be extended to St. Joseph, it being necessary to expend a mere nominal sum for a road bed thirty-five miles from St. Joseph to Laporte. This will form a magnificent integral line from St. Joseph to Cincinnati, via Indianapolis, passing through the capitals of the coal fields of Laporte, Marshall, Fulton, Miami, Howard, Tippecanoe and Hamilton, in the State of Indiana. In many localities on the lines of these roads, large quantities of iron and iron ore are required for manufacturing purposes, and the convenience necessary for commanding large shipments of iron ore from Marquette to the interior of Indiana, via St. Joseph, will be at once afforded by the construction of the Chicago and Michigan Grand Trunk Railway. Again, the large quantities of superior bituminous coal recently found on the line of the New Albany and Salem Railway, as well as that found at various points on our proposed lines, is worthy of consideration. These coals can be transported to St. Joseph for steamers and manufacturing purposes, and as every facility seems to be offered at St. Joseph for manufacturing, there is no improbability in looking for the establishment here of blast furnaces and iron mills. There is here a fine quality of sand for glass manufacturing, and a superior quality of fire and potter's clay, while the large beds of peat and great quantities of wood accessible to this place, may well inspire the hope that St. Joseph may yet be the Pittsburgh of Michigan. The fisheries here are important, and the manufacture of flour and lumber is largely carried on. The superior advantages of this section for growing fruit are too well known to need mention, further than to say that though less than one-fourth of the orchards are as yet in bearing, and though the bearing orchards last year gave less than half a crop, more than \$200,000 were paid to the fruit growers of this section the past season. The amount of business the road can secure at this port may be estimated by referring to the letters received from Milwaukee, and it may be added that Mr. Thompson, of the Western Union Railroad, says he can furnish from Racine all the business a railway from here can do.

"Mr. Miller, one of the oldest railroad engineers in the country, says the country along the line of our road is more favorable for the construction of a railroad than any he ever saw. There are no rock cuts or expensive gradings, very little bridging, and plenty of timber for ties, and the very best gravel for ballasting. At many points along the line flourishing manufacturing towns are found. At Watervliet, twelve miles east of this place, the Paw Paw river and lake furnish a constant and superior water power. This power can be greatly improved, though at present a single lumber mill situated here is capable of sawing 100,000 feet of lumber every ten hours. At Hartford, Lawrence and Paw Paw there is water power for large manufacturing establishments. The water power afforded by the Kalamazoo river, at Oshtemo, is scarcely excelled in the State. The flourishing woolen factory at this place is being enlarged to double its present capacity, and the flouring mills here, as well as at Paw Paw, are capable of manufacturing large quantities of flour for export, from the abundant and greatly superior wheat grown in this part of the State. Hastings, the county seat of Barry county, has a fine water power, while at Grand Ledge, where is found a stratum of coal six feet thick, and superior building stone, the water power is ample and constant, nearly equal to any in the State. The very superior water power found at Lansing, together with the coal found near it, will not long remain unoccupied by large and successful manufacturing establishments. I notice that the increase of value of real estate in Ingham county, in ten years, is from \$1,233,730 to \$6,106,798, as returned in 1860. Most of this increase is in Lansing, and there is no question that the city is improving now more rapidly than it has ever before.

"You made inquiry of me in regard to the practicability of transporting lumber from Flint to Chicago by our roads. After full consideration, I am free to say that I think large amounts would be sent through by rail, and much of it would be forwarded direct to the consumers in Indiana and Illinois. The freights would range from \$4 to \$9 per thousand feet. Salt could also be carried at paying rates.

"The question of constructing the railway line proposed from Port Huron to Chicago, via Lansing and St. Joseph, is worthy the attention of not only connecting lines and the citizens of the counties it is to pass through, as well as the business men of Chicago, but it is one that should command the attention of every capitalist anxious to make a good investment, and at the same time find that his investment results in promoting the prosperity of a large class of citizens. The road is an absolute necessity. The business it can command is awaiting its construction. The investment, aside from the large donations the line receives, and the cheapness with which a first class line can here be constructed, must result in making prompt and satisfactory returns to the proprietors of the line.

"Hoping for complete success in the eminently practical project, I remain,

"Your obedient servant,"

"J. P. THOMPSON,

"Sec. C. & M. G. T. R."

## Note 15—Page 15.

**PLASTER AND COAL.**—In several places in this and New York State the Grand Rapids Plaster has been subjected to a chemical analysis, in which it has invariably sustained its superiority over Ohio, New York or Nova Scotia rivals. It is composed of the following named ingredients, and in this ratio:

|                     |     |
|---------------------|-----|
| Water.....          | 20  |
| Lime.....           | 31  |
| Sulphuric Acid..... | 46  |
| Foreign Matter..... | 3   |
| Total.....          | 100 |

**BUSINESS LAST SEASON.**

|                                | Tons.   |
|--------------------------------|---------|
| <b>Eagle Mills—</b>            |         |
| Tons of Rock Plaster.....      | 8,000   |
| Tons of Ground Plaster.....    | 4,000   |
| Barrels of Ground Plaster..... | 8,000   |
| Barrels of Stucco.....         | 16,000  |
| Total quarried, about.....     | —16,000 |
| <b>Florence Mills—</b>         |         |
| Amount sold and on hand.....   | 18,000  |
| <b>Old Mills—</b>              |         |
| Amount sold and on hand.....   | 5,000   |
| Total.....                     | 39,000  |

It is claimed that the Alabaster Plaster is richer in the elements which render gypsum valuable for agricultural and mechanical uses, than any other yet discovered. In support of this, the following analysis made by Prof. S. P. DUFFIELD, of Detroit, severally of the Alabaster, Grand Rapids and Ohio Plaster, has been published:

|                     | Alabaster. | Grand Rapids. | Ohio.  |
|---------------------|------------|---------------|--------|
| Lime.....           | 36.08      | 32.67         | 32.27  |
| Sulphuric Acid..... | 54.25      | 44.44         | 45.95  |
| Water.....          | 8.89       | 19.00         | 20.70  |
| Organic Matter..... | 78         | 3.89          | 1.06   |
|                     | 100.00     | 100.00        | 100.00 |

Last season was the first of the opening of these beds for any extensive operations. The supply is unlimited, and the opening of these roads will stimulate the production probably more rapidly than any other public work in Michigan could do.

From the "First Biennial Report" of Prof. A. WINCHELL, State Geologist, the following extracts are made, as showing the vast extent and rich material of the coal fields of Michigan:

"The coal measures, with the overlying Woodville sandstone, occupy the whole central area of the lower peninsula. The territory covered, embraces the counties of Saginaw, Shiawassee, Clinton, Ionia, Montcalm, Gratiot, Isabella and Midland, and the greater part of Tuscola. Genesee, Ingham, Eaton and Bay, being nearly thirteen counties, besides considerable portions of Livingston, Jackson, and probably other counties on the north. The whole area underlain by the coal measures is approximately 187 townships, or 6700 square miles. Over nearly the whole of this extent of country the measures will be found productive."—Page 114.

"The coal is bituminous, solid, generally free from foreign matters, but is intersected by a thin belt of iron pyrites, which is also slightly disseminated through the contiguous portions of the coal. The coal furnishes a glistening coke, samples of which we so much admired at the State Fair."—Page 116.

"In the vicinity of Corunna, which is still further within the basin, the coal has been successfully worked on a small scale for a number of years. From the outcrop in the bank of a small creek on the W.  $\frac{1}{2}$  N. E.  $\frac{1}{4}$  sec. 22, Caledonia, Mr. Alexander McArthur has removed several thousand bushels of broken coal for the supply of neighboring blacksmiths.

"The coal is of a handsome quality, and is intersected, like the seam in Jackson county, by a streak of pyrites.

"At Owosso, a shaft was sunk by the Detroit and Milwaukee Railroad Company, with the following result:

|                                                                                                                                     |                       |
|-------------------------------------------------------------------------------------------------------------------------------------|-----------------------|
| Sandstone, flesh colored, seen also in bed of river.....                                                                            | 14 ft.                |
| Black band iron ore.....                                                                                                            | 1 ft.                 |
| Cannel coal.....                                                                                                                    | 2 ft.                 |
| Dark shales, with vegetable remains.....                                                                                            | 15 ft.                |
| Black band.....                                                                                                                     | 8 in.                 |
| Bituminous coal.....                                                                                                                | 3 ft.                 |
| Bluish soft clay.....                                                                                                               | 1 ft.                 |
| Shales and arenaceous fire-clays, (as ascertained by boring), the lower part black, terminating in a hard pyritiferous stratum..... | 148 $\frac{1}{2}$ ft. |

"Near the mouth of Six Mile Creek, in the township of New Haven, numerous explorations have been made. A shaft sunk at the mouth of the creek, furnished the following section. The shaft was sunk by Messrs. Silliman & Walker, 37½ feet, and the section continued by boring:

|                                       |        |
|---------------------------------------|--------|
| Superficial materials.....            | 11 ft. |
| Clay, bluish black.....               | 9 ft.  |
| Calcareo-argillaceous black band..... | 2 ft.  |
| Cannei coal.....                      | 2 ft.  |
| Clay and coal.....                    | 3½ ft. |
| Coal.....                             | 5 ft.  |
| Clay, light colored.....              | 2½ ft. |
| Coal.....                             | 2 ft.  |
| Clay, light colored.....              | 1½ ft. |
| Coal.....                             | 2 ft.  |
| Clay, light colored.....              |        |

"According to the statement given above, we have here eleven feet of coal within a vertical thickness of 18½ feet."—Page 123.

#### Note 16—Page 16.

**MUSKEGON LUMBER PRODUCT.**—A special correspondent of the *Detroit Free Press* gives the following statement of the lumber product of the Muskegon country for 1865:

AMOUNT OF LUMBER IN FEET AND THE NAMES OF THE PARTIES WHO PUT THE LOGS IN THE RIVER LAST SEASON.

|                           |            |
|---------------------------|------------|
| J. & H. Beldier.....      | 6,104,816  |
| E. G. McQuestion.....     | 295,418    |
| G. Truesdell.....         | 7,131,414  |
| Ryerson, Hills & Co.....  | 11,540,359 |
| S. A. Brown & Co.....     | 5,517,000  |
| White & Swan.....         | 3,940,307  |
| Warren & Ives.....        | 3,000,000  |
| Martin, Perley & Co.....  | 2,922,014  |
| O. P. Pillsbury & Co..... | 5,209,260  |
| J. H. Hackley & Co.....   | 9,478,040  |
| Wm. Bunker.....           | 1,350,000  |
| Curtiss & Nelson.....     | 2,514,000  |
| C. Davis & Co.....        | 4,786,789  |
| T. D. Stimson.....        | 2,889,640  |
| Marsh & Foss.....         | 5,695,000  |
| D. A. Blodgett.....       | 493,586    |
| A. Y. Chamberlain.....    | 2,200,000  |
| James Farr, Jr.....       | 3,597,000  |
| G. R. Roberts & Co.....   | 6,289,222  |
| B. Merrill.....           | 1,550,000  |
| Ryerson & Johnson.....    | 3,000,000  |
| L. G. Mason & Co.....     | 14,777,108 |
| A. B. Watson.....         | 1,000,000  |
| S. N. Wilcox.....         | 9,625,000  |
| Newaygo Co.....           | 9,702,885  |
| A. A. Maxim.....          | 2,000,000  |

127,799,866

"These figures only give the logs run last summer. In addition to these there was 15,000,000 feet of old stock, which would make the aggregate 142,799,866 feet of lumber sawed. In addition there was manufactured between eight and ten millions of shingles, one million feet square timber, one million of railroad ties and thirty millions of lath.

"The mills commence about the first of April. There are twenty-one in all. The following table gives their owners' names, value of each, number of men employed, and capacity:

|                              | Value of<br>Mills. | No. of<br>men<br>Empl'd. | Capacity<br>of Mills. |
|------------------------------|--------------------|--------------------------|-----------------------|
| J. & H. Beldier.....         | \$30,000           | 35                       | 6,000,000             |
| G. Truesdell.....            | 60,000             | 55                       | 9,000,000             |
| Ryerson, Hills & Co., 2..... | 60,000             | 75                       | 12,000,000            |
| S. A. Brown & Co.....        | 25,000             | 45                       | 6,000,000             |
| White & Swan.....            | 25,000             | 30                       | 5,000,000             |
| James Farr, Jr.....          | 80,000             | 95                       | 12,000,000            |
| Martin, Perley & Co.....     | 25,000             | 35                       | 5,000,000             |
| O. P. Pillsbury & Co.....    | 50,000             | 45                       | 10,000,080            |
| J. H. Hackley & Co.....      | 25,000             | 40                       | 6,000,000             |
| I. H. Hackley & Co.....      | 16,000             | 25                       | 4,000,000             |
| Thos. Turnbull.....          | 16,000             | 25                       | 4,000,000             |
| C. Davis & Co.....           | 35,000             | 40                       | 8,000,000             |
| Marsh & Foss.....            | 30,000             | 40                       | 6,500,000             |
| Geo. R. Roberts & Co.....    | 45,000             | 45                       | 8,000,000             |
| B. Merrill.....              | 16,000             | 25                       | 4,000,000             |
| Ryerson & Johnson.....       | 15,000             | 25                       | 4,000,000             |
| L. G. Mason & Co.....        | 75,000             | 90                       | 12,000,000            |
| L. G. Mason & Co.....        | 20,000             | 30                       | 5,000,000             |
| S. N. Wilcox.....            | 50,000             | 45                       | 8,000,000             |
| Newaygo Company.....         | 40,000             | 65                       | 9,000,000             |
| A. A. Maxim.....             | 8,000              | 20                       | 3,000,000             |
| <b>Total.....</b>            | <b>\$745,000</b>   | <b>930</b>               | <b>147,800,000</b>    |

"It will be seen that the amount cut was not equal to the capacity of the mills. This was owing to the fact that some of the mills were new and not completed in season to make a full season's work.

**SAGINAW LUMBER PRODUCT.**—For the statement appended of the lumber product of Saginaw for 1865, I am indebted to GEO. F. LEWIS, Esq., editor of the *East Saginaw Courier*:

"From Salina to the mouth of Saginaw river, there are 56 mills in operation, of which two were burned early in the season, Paine's at Saginaw City, and Rust's at Zilwaukee. There are being built four new mills on new sites, and re-building the burnt ones, together with an early start for Sage & McGraw, and Shaw & Williams, will increase the capacity 300,000,000, besides the mills on the Tittabawassee, Cass and Bad rivers, whose lumber comes to Saginaw for shipment, and will add 30,000,000 more, making a round total of 300,000,000 capacity for Saginaw and tributary rivers.

"The Tittabawassee rafted out 150,000,000, the Cass river 50,000,000, Flint 30,000,000, and Bad river 20,000,000 feet of pine saw logs, board measure, besides which was some from the Bay.

"Of shingle mills, there are fourteen on Saginaw, Cass, and Tittabawassee rivers, making last year 60,000,000.

| Mills.                  | Feet<br>Sawed. | Lumber<br>on hand. | Sold on<br>Dock. |
|-------------------------|----------------|--------------------|------------------|
| Forest City.....        | 5,300,000      | 1,300,000          | 1,300,000        |
| Green & Harding.....    | 3,500,000      | 600,000            | 400,000          |
| Heather & Allison.....  | 3,600,000      | 75,000             | 75,000           |
| Taylor.....             | 5,300,000      | 1,500,000          | 1,000,000        |
| *William Bro.....       | 5,600,000      | 400,000            | 300,000          |
| †A. W. Wright.....      | 3,000,000      | .....              | .....            |
| Bundy.....              | 5,250,000      | 900,000            | 300,000          |
| Rust.....               | 3,500,000      | 700,000            | 300,000          |
| Sutherland.....         | 500,000        | 200,000            | .....            |
| Burnham & Co.....       | 4,000,000      | 500,000            | 100,000          |
| Curtis & Corning.....   | 4,000,000      | 1,200,000          | 700,000          |
| Chapin's.....           | 5,000,000      | 750,000            | 500,000          |
| Briggs.....             | 4,000,000      | 367,000            | 367,000          |
| F. P. Sears.....        | 7,000,000      | 1,300,000          | 660,000          |
| G. C. Warner & Co.....  | 6,350,000      | 686,000            | .....            |
| Burt Brothers.....      | 3,800,000      | 400,000            | 100,000          |
| *Lee's.....             | 4,300,000      | 1,100,000          | 600,000          |
| Little's.....           | 4,100,000      | 1,000,000          | .....            |
| Babcock's.....          | 3,200,000      | 300,000            | 50,000           |
| Chicago, S. & L.....    | 3,300,000      | 400,000            | .....            |
| Merrill's.....          | 5,650,000      | 1,300,000          | .....            |
| Shaw & Williams.....    | 5,500,000      | 900,000            | 325,000          |
| W. R. Burt.....         | 5,300,000      | 900,000            | 300,000          |
| Gould's.....            | 3,000,000      | 300,000            | 300,000          |
| Gordon & Weaver.....    | 3,300,000      | 800,000            | 400,000          |
| Garrison.....           | 4,200,000      | 600,000            | .....            |
| S. McLane.....          | 3,500,000      | 600,000            | 100,000          |
| J. P. Allison.....      | 6,000,000      | 1,100,000          | 1,000,000        |
| †Rust.....              | 9,455,500      | 1,400,000          | 260,000          |
| Onclida Mill.....       | 8,000,000      | 2,000,000          | .....            |
| Braddock.....           | 3,000,000      | 100,000            | .....            |
| Huron, S. L. & Co.....  | 3,180,000      | 800,000            | 400,000          |
| Sage & McGraw.....      | 9,000,000      | 7,000,000          | 7,000,000        |
| Drake.....              | 3,000,000      | 200,000            | 200,000          |
| Bolton.....             | 5,500,000      | .....              | .....            |
| T. & Monthrop.....      | 6,000,000      | 400,000            | 400,000          |
| Moore & Smith.....      | 7,000,000      | 900,000            | .....            |
| Martin Waters.....      | 3,000,000      | 50,000             | .....            |
| Young's.....            | 1,250,000      | 100,000            | 100,000          |
| Miller & Post.....      | 4,000,000      | 800,000            | .....            |
| Peter & Lewis.....      | 4,000,000      | 1,100,000          | 800,000          |
| J. J. McCormick.....    | 4,400,000      | 200,000            | .....            |
| Rust.....               | 4,600,000      | 800,000            | 400,000          |
| Watson.....             | 2,000,000      | 450,000            | .....            |
| N. B. Bradley.....      | 6,800,000      | 300,000            | .....            |
| W. Peters.....          | 7,200,000      | 1,300,000          | 450,000          |
| A. Miller.....          | 6,000,000      | 1,200,000          | .....            |
| H. M. Bradley & Co..... | 4,600,000      | 300,000            | 250,000          |
| Catlin.....             | 3,500,000      | 300,000            | .....            |
| Fay.....                | 4,500,000      | 300,000            | .....            |
| Jas. Shearer & Co.....  | 6,815,000      | 340,000            | .....            |
| Pitts.....              | 6,500,000      | 645,000            | .....            |
| McKwen.....             | 6,000,000      | 600,000            | 600,000          |

Total, 56 Mills.....250,348,000 41,453,000 22,236,000

\* Two mills. † Mill burnt. ‡ Two mills, one burnt.

No. feet of logs in boom: Forest City, 500,000; Green & Harding, 300,000; Taylor, 1,000,000; A. W. Wright, 760,000; Rust, 250,000; Sutherland, 25,000; Curtis & Corning, 200,000; G. C. Warner & Co., 1,250,000; Lee's, 60,000; Merrill's, 1,500,000; Shaw & Williams, 500,000; W. R. Burt, 150,000; Gordon & Weaver, 250,000; Huron S. & L. Company, 200,000; Sage & McGraw, 3,000,000; Bolton, 600,000; T. & Monthrop, 150,000; Moore & Smith, 900,000; Young's, 100,000; Miller & Post, 300,000; Peter & Lewis, 60,000; Rust, 500,000; N. B. Bradley, 1,000,000; W. Peters, 300,000; A. Miller, 150,000; Fay, 250,000; Jas. Shearer & Co., 20,000; Pitts, 700,000; McKwen, 600,000. Total.....15,165,000  
From amount of lumber on hand.....41,453,000  
Deduct amount sold on dock.....22,236,000

Balance unsold.....19,091,000

## Note 17—Page 17.

"NORTHERN MICHIGAN."—How rapidly this section of our peninsula is being settled, may be judged by the reports from the land offices. Fifty homestead entries were made at the Traverse City Land Office during the month of August, covering 6800 acres. During the same period, 6,600 acres were located with land warrants and agricultural scrip, and 914 acres were purchased with cash, making a total of 14,318 acres. Fifty-four homestead entries were made at the same office during the month of January, covering 8196 acres; 4280 acres were located with warrants and scrip, and 2056 acres sold for cash, making a total of 14,532 acres. During the three months ending the 31st of August last, 23,006 acres were taken up at the East Saginaw Land Office, 5291 acres by actual settlers, and the balance in warrants and Agricultural College scrip. The actual settlers have located principally in Saginaw, Bay, Tuscola and Iosco counties, the scrip and bounty land warrants chiefly covering pine lands. It is a noticeable fact that a large portion of the actual settlers are immigrants from various sections of Canada, and many are returned soldiers. A large portion of the immigration from Canada has taken place since the war has been brought to a close. There are millions of acres of unsettled lands in Northern Michigan, of the best quality, which are beginning to attract the attention of those who are looking for new homes in the West. The true nature of the soil, climate and general character of this part of our State is just now beginning to be appreciated abroad.

**FRUIT TRADE**—In this connection, the fruit trade of Michigan merits mention. The climate of Michigan appears to be pre-eminently adapted to the cultivation of fruit. The increase since 1850 has been quite as remarkable as that in any other product. In that year, the total product amounted to only \$130,522; in 1860, it was reported at \$1,116,219. The richest fruit-growing regions at present are in Berrien and Van Buren counties, but the product is being rapidly extended northward, near the shores of Lake Michigan, as far even as Grand Traverse. I am indebted to F. H. STEVENS, Esq., of St. Joseph, for the following statement of fruit-bearing trees and vines, in 1865, in the townships of St. Joseph, Royalton, Benton and Hagar, Berrien county:

## FRUIT TREES.

|            |         |             |        |
|------------|---------|-------------|--------|
| Peach..... | 207,639 | Apple.....  | 67,067 |
| Pear.....  | 40,967  | Cherry..... | 9,093  |
| Plum.....  | 2,695   | Quince..... | 2,552  |

## VINES AND BERRIES.

|                  |         |                  |        |
|------------------|---------|------------------|--------|
| Grape Vines..... | 33,449  | Blackberry ..... | 21,682 |
| Strawberry.....  | 162,800 | Raspberry .....  | 14,610 |

The amount received in the counties of Berrien and Van Buren the past year, for fruit sent to the Chicago market, is estimated at \$275,000. Fruit has already become a prominent item in the rich and varied list of the exports of Michigan. The *Detroit Free Press*, of a late date, contained a lengthy article upon the subject, from which a paragraph is selected:

"Along most of the line of the Detroit and Milwaukee Railroad, the country is newer; but Oakland, Genesee, Shiawassee, Clinton and Kent counties produce considerably. We put a fair estimate of the shipments on the line of this road at 75,000 barrels. Beside all these, there have been immense quantities marketed in this city from the surrounding country. The line of the Grand Trunk has produced its share; the St. Clair river country has sent down no small amount, and many have been shipped at St. Joseph, the mouth of the Kalamazoo river, and other points on Lake Michigan. We sum up our estimates of the apple shipments thus far as follows:

|                                                                      |                  |
|----------------------------------------------------------------------|------------------|
| Michigan Central.....                                                | 134,000 barrels. |
| Michigan Southern.....                                               | 110,000 "        |
| Detroit and Milwaukee.....                                           | 75,000 "         |
| St. Clair river, shores of Lake Michigan, and wagons to Detroit..... | 91,000 "         |
| Aggregate .....                                                      | 410,000 "        |

"The prices paid have ranged from \$3.00 to \$4.25. We place the average at \$3.50, although it will probably exceed that figure. This gives the round sum of \$1,435,000 as the proceeds of the sale of apples shipped out of the State. It is truly a source of wealth to our farmers that ought not to be despised, considering the little labor and outlay that it costs. The orchards of the State will become more valuable from year to year as the trees increase in size and age."

It thus appears that the value of our fruit export last year reached the respectable aggregate of over \$1,700,000. The larger portion of this was from the country directly tributary to our roads, and the growth of the product rapidly extends to the northward. The reason of this tendency northward is thus explained by a leading agricultural paper, *The Western Rural*, published at Detroit:

"The law which holds in regard to this question, seems to be this: The winds which pour across a body of water, are warmed by the water, thus rendering the shore toward which they blow warmer than the one from which they blow. The prevailing winds in this part of the country being westerly, we find the eastern shores of all our large lakes warmer than the western shores. This law of temperature is, of course, applicable only to the winter seasons, when the air is colder than the water over which it passes. In summer the same law holds, but the result is exactly reversed. The air being warmer than the water, imparts some of its heat to the water, thus rendering the eastern shores cooler in summer than the western shores. The universal principle of philosophy which applies here is, when two bodies of different temperature come in contact, an equalization of temperature always takes place, rendering the warmer body colder, and the colder body warmer. Accordingly, we find a more equable temperature on the eastern shores of our large bodies of water than on the western. The reverse would be true if our prevailing winds were eastern instead of western."

#### The Grand Rapids *Eagle* says:

"It has been generally supposed that the vicinity of St. Joseph was the only district in the State where the peach was a sure crop. This has been found to be a great mistake, as it does equally well at all points along Lake Michigan. In the vicinity of Muskegon are thousands of acres of excellent fruit lands, well adapted to peaches and grapes, as well as the harder fruits, and for a hundred miles further down the lake, we are told the peach crop rarely if ever fails. All along our western coast, from that cause, the country is destined to a future of untold wealth, which no agricultural region of the West can possibly eclipse."

"To the fruit grower, no region in all the Northwest promises so rich returns as Western Michigan. This may be set down as a fixed fact. Already extensive peach orchards are started, and some of them will commence bearing next season, at the mouths of Grand, Muskegon and White rivers, and as far down the coast as Mason county."

The following from the *Oceana Times* is noteworthy as coming from a locality over one hundred and twenty-five miles north of the southern border of our peninsula:

"We are not much of a hand at boasting about 'big things,' but when it comes to facts and figures, we are capable to compete with our neighbors, and probably make a 'bigger show' than they can, by mentioning the following:

"Mr. H. B. High, in Weare, has in his orchard some plum trees, set out only four years ago, which will yield from six to eight bushels each, one branch of one tree containing a half bushel of fruit, some of them measuring five inches in circumference one way, and six and a quarter inches the other. From Mr. Cheney, in Hart, we have had specimens of peaches of the Early Crawford variety, measuring three and four inches in diameter. Mr. Louis Genereau, from Elbridge, a few days ago brought to town specimens of pears, weighing ten ounces a piece. Mr. E. Irons, of this town, has a large dwarf pear tree on his place, literally covered with fruit of an enormous size. The firm of Chapin & Richmond, of this place, have shipped a large quantity of peaches to Grand Haven within the last two weeks."

"From the foregoing, it is evident that ere many days the northeastern shore of Lake Michigan will become one of the largest and most prosperous fruit countries in the West, and we can assure our readers that Oceana county will come in for its share, as a great number of fruit trees have been set out within a few years, and many more will be planted this fall and the coming spring. Most every farmer in the county has a little orchard set out on his farm, and we hear of but very few cases where the same has proved a failure, and even if it has, it was through recklessness or mismanagement."

In accordance with the law above cited, we should expect to find the eastern shore of Saginaw Bay, in Eastern Michigan, well adapted to fruit growing, as the westerly winds pass over a body of water twenty-five to thirty miles in width before reaching the eastern shore of the Bay. This seems to be the case, as is shown in the following extract from the *East Saginaw Courier*:

"Although not as yet generally known, it is a fact, demonstrated by actual experiment, that the eastern shore of Saginaw Bay is peculiarly favorable to the production of fruit of all kinds, and there is no doubt that it will soon become one of the leading fruit growing sections of Michigan."

"The soil is of excellent character, and the trees being protected both from the frosts and premature germination, have, as far as the experiment has been tried, invariably turned out

robust and thrifty. Persons in this vicinity, whose tastes run to fruit culture, the most profitable of all occupations under favorable circumstances, have the facilities at their own doors for gratifying such taste, with the sure prospect of a rich return. This is a fact worthy of consideration, and ought to elicit the attention of some of our people who are so keenly on the alert for desirable opportunities to invest elsewhere."

*Note 18—Page 19.*

**FLINT AND PERE MARQUETTE RAILWAY.**—The following is a comparative statement of the yearly earnings of this road, for the four years since it was opened for traffic:

| GROSS EARNINGS.                         |             |           |              |
|-----------------------------------------|-------------|-----------|--------------|
| 1862.....                               | \$31,764 37 | 1864..... | \$114,356 77 |
| 1863.....                               | 96,988 04   | 1865..... | 165,197 49   |
| TOTAL NUMBER OF PASSENGERS TRANSPORTED. |             |           |              |
| 1862.....                               | 28,798      | 1864..... | 93,732       |
| 1863.....                               | 68,753      | 1865..... | 108,957      |

**FLINT AND HOLLY ROAD.**—The first annual report of the Directors of the Flint and Holly Railroad has been published, from which we learn that the road is in a prosperous condition. The transactions for the eleven months following the 1st of November, 1864, when the road was opened, are embraced in the report. The gross earnings for the eleven months were \$90,967, of which \$51,670 was received for the transportation of passengers and \$38,563 for freight, the balance from mails, rents, etc. The expenses of operating the road for the same time, including the depreciation of the property of the Company, were \$74,125, leaving a profit of \$16,842.

The total cost of the road, appurtenances, etc., is as follows:

|                                       |           |
|---------------------------------------|-----------|
| Grading and laying iron.....          | \$142,377 |
| Bridges.....                          | 6,351     |
| Iron for track.....                   | 152,057   |
| Station buildings, fixtures, etc..... | 30,639    |
| Telegraph.....                        | 449       |
| Land, land damages, and fences.....   | 16,973    |
| Engineering and other expenses.....   | 22,188    |
| Tools and machinery.....              | 3,302     |
| Rolling stock.....                    | 66,182    |
| Total cost.....                       | \$440,418 |

A dividend of four per cent., exclusive of Government tax, was paid to the stockholders on the 5th of November. The depot buildings and freight houses are first class buildings, but the Company will be compelled to erect new brick engine houses and machine shops, woodsheds, turntables, etc., as the buildings which are now used for such purposes are only temporary structures. The business of the road demands an increase of rolling stock, but the Directors are of the opinion that all the future wants of the Company can be supplied from the earnings of the road, besides leaving sufficient funds to pay liberal semi-annual dividends. The Directors express themselves satisfied with the cost of the road, although the sum by far exceeded the original estimates. The success of the road is certainly a gratifying evidence of the business capacity of that section of the State.  
—*Detroit Advertiser and Tribune.*

**SAGINAW BUSINESS.**—At this point a word may be added as to the business of Saginaw. The magnitude of its lumber trade has already been stated. From a very able report of Hon. W. H. TAYLOR, chairman of the Committee on Salines, made to the State Legislature for 1865, we obtain the following statistics of the salt business of Saginaw for 1864:

|                                       |                     |
|---------------------------------------|---------------------|
| Number of Companies in operation..... | 67                  |
| “ Blocks.....                         | 118                 |
| “ Kettles.....                        | 4,210               |
| “ Solar covers.....                   | 4,949               |
| “ Acres of land.....                  | 9,475 $\frac{1}{2}$ |

|                                                |             |
|------------------------------------------------|-------------|
| Investment.....                                | \$2,269,500 |
| Salt made in 1864 (barrels).....               | 529,078     |
| Men employed.....                              | 892         |
| Cords of wood consumed.....                    | 109,368     |
| Aggregate value of wood.....                   | \$286,545   |
| Value of barrels used.....                     | 238,074     |
| Aggregate value of salt at shipping point..... | 1,190,410   |

Fifty years of progress in the manufacture of salt in the Kanawha valley did not equal the progress made in four years in the Saginaw valley; and forty-two years of progress at the Onondaga salt springs, the leading salt producing locality in the United States since 1797, did not equal the progress made there in five years.

Of the commerce of Saginaw, the *Daily Enterprise* of that city, in an issue in October last, said:

"Some idea of the extent of the business done on the Saginaw river may be obtained by carefully watching our report of Chicago Marine News. As a sample we will state that on the 19th inst., the registered arrivals at that port showed the receipts of Saginaw lumber to be two millions five hundred and fifteen thousand feet; while of salt the arrivals were the snug number of thirteen thousand three hundred and sixty-six barrels, to that port alone. The value of these products, averaging lumber at \$30 per M., and salt at \$1.80 per barrel, would be:

|                                       |             |
|---------------------------------------|-------------|
| Lumber, 2,515 M feet, at \$30 .....   | \$75,450 00 |
| Salt, 13,366 bbis., at \$1.80.. ..... | 24,058 80   |
| Making .....                          | \$99,508 80 |

As the aggregate valuation of the exports of this valley poured upon the wharves of Chicago in a single day. When we add to this the export to Toledo, Cleveland, Buffalo, and other ports, the aggregate value of the whole product sent out of the valley arriving at the several lake ports on the 19th, could not have been less than \$110,000. This is only a sample of what is doing and being done in this valley, and we invite our citizens to look at the figures and approximate business with just pride, while the denizens of the little retail interior cities of the State may open their eyes with genuine astonishment. We doubt if ever Detroit will equal the Saginaws in the aggregate of the exports, products of her own soil and labor."

How business in this part of Michigan increases with the facilities afforded for its prosecution, may be seen from the following statement of the shipments at a single station on the line of the Flint and Pere Marquette road—a point unheard of until the opening of that outlet—Mt. Morris, in Genesee county. The article is from the *Detroit Advertiser and Tribune*:

"During the year ending January 31, 1886, there were sent from Mt. Morris, by the Flint and Pere Marquette Railway, 3,076,500 feet of lumber, 4,277 M of shingles, and 495,000 staves. The lumber cut at the lumber mills of McCreery, Crocker & Otis, Huyck & Griffs, (in Forrest), Weeks, Crawford, and the shingle mills of Clark & Cook, Adams, and Look, are shipped from this point. Mr. Barber has just got a new circular saw mill in operation about five miles west of this village. This gentleman also intends to erect a flour mill and a saw mill here, having already purchased the stones and machinery for the former. A portion of the above information was obtained from George J. Rae, the gentlemanly station agent at this point."

#### Note 19—Page 20.

WHAT CHICAGO SAYS.—The Chicago *Tribune* of the 31st of December last, in an article on the subject of the railroads of that city, thus speaks of the line from Port Huron:

"The people of Western Michigan have taken hold of the matter, and there is every prospect that the road will be built at no very distant date. The proposal is to construct the line from Port Huron, opposite Sarnia, to Flint, thence to Lansing, and St. Joseph, on the lake shore, passing round the head of the lake to Chicago. Our city has a large interest in the project. It will open to our trade the richest agricultural region of Western and Central Michigan, besides giving us direct connection with the forest and mineral wealth of the Saginaw valley, and add another to our great through routes to the seaboard. In September last the matter was brought before several of our prominent railroad men, who considered the enterprise one that should be met by Chicago with all the material and aid which was required."

And the *Chicago Times* of Feb. 13, also makes the following favorable mention of the enterprise:

"So far as the building of this road will affect the interests of Chicago, it needs no statistics of public traffic, such as railroad reports are always seasoned with. It is enough that it will give this city direct communication with the great salt, plaster and lumber region of Saginaw, *via* the Lansing and Saginaw road, and with the lumber, plaster and fruit regions of Grand Rapids and Muskegon, *via* the Grand Rapids and Indiana road, which it crosses only about 25 miles from Grand Rapids; and open to our commerce a large and rich belt of country wholly disconnected from Detroit or any other competing market, to which our merchants can sell, and in which our fruit and produce dealers can buy."

*Note 20—Page 21.*

**GRAND TRUNK.**—The Grand Trunk interest have from the beginning manifested a desire to lend a helping hand to this enterprise. In addition to various kindly offices cheerfully extended by their enterprising and far-sighted executive in Canada, the President of the Company has made the following highly favorable mention of it. I quote from the speech of Hon. ED. WM. WATKIN, at the half yearly general meeting of the shareholders in London, in December last:

"It is very important for you to get an outlet to Halifax through British territory, the line passing through rich coal and iron fields, and opening up a field for traffic. On the other hand, a project has been going on for two years, and which has now taken a definite shape, for extending the Grand Trunk gauge to Chicago. The gauge of the Grand Trunk is five feet six inches, and the gauge of the American lines, with two exceptions, is four feet eight and a half inches. The exceptions are the Erie and Atlantic and Great Western and the Ohio. The consequence is that we find immense difficulties in dealing with the traffic, having the whole of the Western produce to tranship. Hence we laid before you a proposition in which we stated we intended to lay down, upon our Detroit and Port Huron line, and to Toronto on the one side, and to Port Erie on the other, an intermediate rail to enable us to carry the traffic which comes over our own gauge from the four feet eight and a half inch gauge. But we think we can lay better proposals before you, and we think it would be a better thing, provided what I tell you is carried out, to widen the gauge of the sixty miles between Port Huron and Detroit, than to lay down an intermediate rail. The proposition which has been made is this: The district between Port Huron and Chicago—I am speaking now of the whole of the interests through Michigan, and large interests of Chicago—these interests have proposed to us that if we will, through our connections here and in America, provide the iron rails and plant, and work the line, they will construct the line from Port Huron to Chicago. In order to do that they must lay out one million sterling of their money, and they will lay that out if we will find another million, and they will give us a first mortgage to cover our outlay. This is so important, and involves such enormous interests, that we ought to give it every encouragement we can, and we have to-day, at the board, passed a resolution to say that we consider the project of immense value, and we shall, as a board, recommend you, when these gentlemen are ready with their proportion, to give it any assistance which you may voluntarily wish to lend. I only ask you to imagine the Grand Trunk Railway as it would be then—a railway 2000 miles in length, from Chicago at the one end to Halifax and Portland at the other, in one unbroken gauge. With regard to Chicago, you are so familiar with the wonderful results which have taken place there that I need not dwell at all upon them; suffice it to say, that there are 8000 miles of railway beginning and ending at Chicago. It is the great emporium of the West, and, as far as we can see, there is nothing which will alter its position or tend to diminish its resources; but on the contrary, indeed, during the whole of the war, the great western city has been increasing in a much larger ratio than before, owing to the energy of the people—and they are the most energetic people, certainly, in the world—and I believe that the whole West is in a sounder and an actually more progressive position now than before that unfortunate struggle commenced."

**INFLUENCE OF RAILROADS UPON AGRICULTURE.**—This pamphlet would be incomplete without a word for the benefit of the farmers of Michigan, living near the proposed line. Their friendly countenance is desired, and their pecuniary assistance is absolutely essential to the placing of the enterprise upon an independent basis. They have exhibited an enlightened spirit in all the localities thus far canvassed, and it is not doubted that they will continue to aid us according to their means.

The influence of railroads upon the great agricultural interests of the country, received the thoughtful attention of Mr. KENNEDY, the Superintendent of the last U. S. census. In his Report he fills half-a-dozen of his broad folio pages with facts demonstrating that it is to railroads that the

West owes its agricultural prosperity. He first shows that the number of horses, mules and asses in the Union increased only twelve per cent. from 1840 to 1850, and fifty-one per cent. from 1850 to 1860, or after the making of three-fourths of the railroads of the country. In five of the Northwestern States, 9000 miles of railroad were constructed between 1850 and 1860, and yet the increase in the same descriptions of stock in those States was 106 per cent. Mr. K. then proceeds to show the positive advantages which all departments of agriculture have derived from the construction of railroads:

"So great are their benefits that, if the entire cost of railroads between the Atlantic and Western States had been levied on the farms of the Central West, their proprietors could have paid it, and been immensely the gainers. This proposition will become evident if we look at the modes in which railroads have been beneficial. These modes are, first, in doing what could not have been effected without them; second, in securing to the producer very nearly the prices of the Atlantic markets, which is greatly in advance of what could have been had on his farm; and third, by thus enabling the producer to dispose of his products at the best prices at all times, and to increase rapidly both the settlement and production of the interior States."

Mr. K. then notes the fact, that of the nine millions of tons transported between the East and the West in 1862, only three million tons were carried by water, and says:

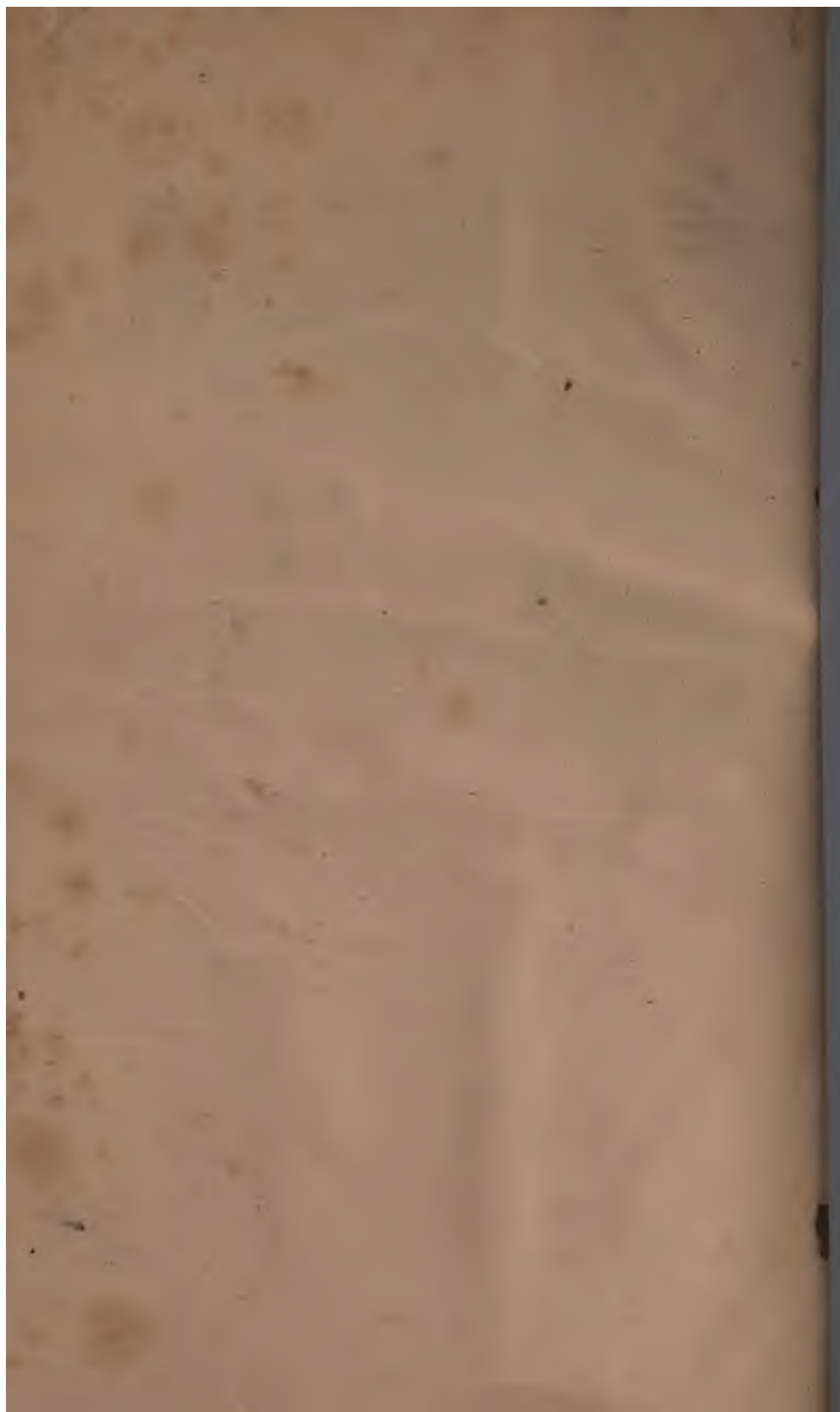
"It is evident therefore, that railroads not only carry two-thirds of the freights to and from the West at the present time, but that such is the rapid increase of western products, that the time is near at hand when all that can be carried by water will be but a small proportion of the whole. In fine, in the absence of railways the cultivation of grain beyond the immediate wants of the people must cease, or the surplus perish in the fields. Such was exactly the state of things in the West before the general introduction of railroads. The great grain fields of Ohio, Indiana, Illinois, and beyond the Mississippi, have been mainly cultivated because railroads made their products marketable and profitable."

"There is another respect in which the influence of railroads is almost as favorable to agriculture as that of cheapening the transportation of produce. It is that of cheapening the transportation, and therefore reducing the prices of foreign articles and eastern manufactures, consumed by the farmers of the interior. We need not adduce tables to illustrate this; for it is quite obvious and well known that this has been the effect, though perhaps not to so great an extent as the reverse in the case of produce."

"The increase in the valuation of five Northwestern States, from 1850 to 1860, was \$1,066,716,118. It is not too much to say that one-half of this increase has been caused by railroads, for we experience already the impossibility of carrying off the surplus products of the interior with our railroads. Putting the increase of value due to railroads at a little more than one-third, we have four hundred millions of dollars added to the cash value of farms in those five States by the construction of railroads. This fact will be manifest if it is conceded that the best lands in Illinois were worth but \$1.25 per acre prior to the construction of railroads, and are now worth twenty dollars."

To bring these facts to bear upon the enterprise in hand, it only need be stated, that the grain product of the counties traversed by these roads was in 1864 about three million bushels. It is reasonable to assume that the cost of the farmer of marketing say only one-half of this grain was ten cents per bushel greater than it would have been with the roads in operation. Of wool the product was about fourteen hundred thousand pounds, or at least one million pounds, of which the increased cost of carrying it to market could not have been less than three cents per pound. On these two items alone, then, the farmers of these counties will annually save one hundred and eighty thousand dollars when these roads shall have been completed. And this without regard to competition, which any one who carefully notes the published range of prices of produce at stations on the Central and Southern roads, cannot fail to observe frequently makes prices far inland equal those at either Detroit or Toledo. A brief consideration of the matter will satisfy any farmer that the direct benefits to accrue to the people along the line of these roads from their construction, will be equal to half a million of dollars per annum, to say nothing about the enhanced value certain to be given to real estate.











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